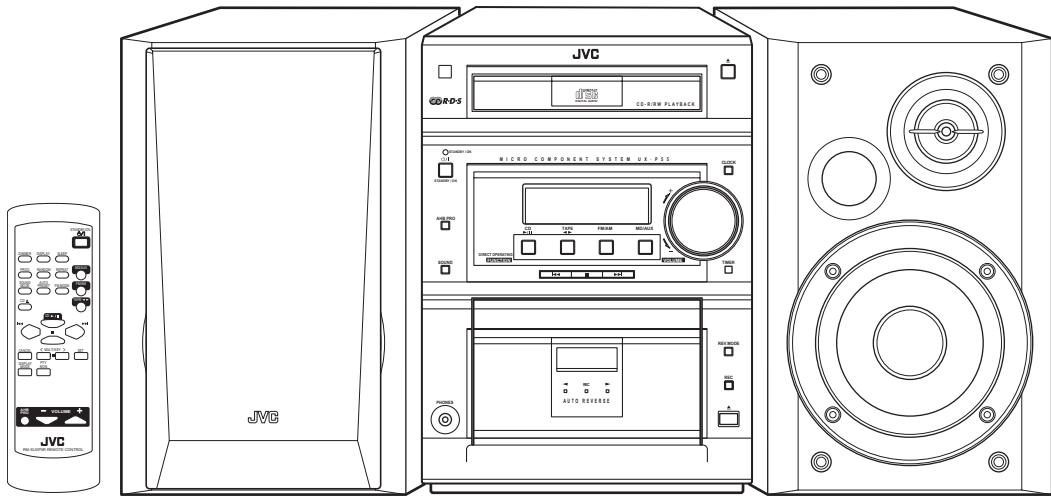


JVC

SERVICE MANUAL

MICRO COMPONENT SYSTEM

UX-P55



SP-UXP55

CA-UXP55

SP-UXP55



COMPACT
DISC
DIGITAL AUDIO

Area Suffix

- | | |
|----------|--------------------|
| B ----- | U.K. |
| E ----- | Continental Europe |
| EN ----- | Norther Europe |

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SECTION 1

Important Safety Precautions

1.1 Safety Precautions

- (1) This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
- (2) Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturers warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
- (3) Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (▲) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
- (4) The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.
- (5) Leakage shock hazard testing)

After reassembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock. Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).

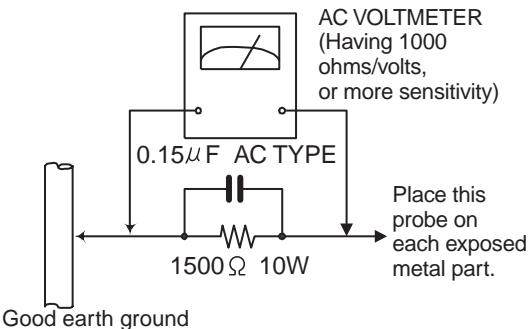
• Alternate check method

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000Ω per volt or more sensitivity in the following manner. Connect a 1,500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground.

Measure the AC voltage across the resistor with the AC

voltmeter.

Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Voltage measured any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5μmA AC (r.m.s.).



1.2 Warning

- (1) This equipment has been designed and manufactured to meet international safety standards.
- (2) It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
- (3) Repairs must be made in accordance with the relevant safety standards.
- (4) It is essential that safety critical components are replaced by approved parts.
- (5) If mains voltage selector is provided, check setting for local voltage.

1.3 Caution

Burrs formed during molding may be left over on some parts of the chassis.

Therefore, pay attention to such burrs in the case of performing repair of this system.

1.4 Critical parts for safety

In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (—), diode (■) and ICP (●) or identified by the " " mark nearby are critical for safety. When replacing them, be sure to use the parts of the same type and rating as specified by the manufacturer.
(This regulation dose not Except the J and C version)

1.5 Safety Precautions (U.K only)

- (1) This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits.
- (2) Any unauthorised design alterations or additions will void the manufacturer's guarantee; furthermore the manufacturer cannot accept responsibility for personal injury or property damage resulting therefrom.
- (3) Essential safety critical components are identified by (Δ) on the Parts List and by shading on the schematics, and must never be replaced by parts other than those listed in the manual. Please note however that many electrical and mechanical parts in the product have special safety related characteristics. These characteristics are often not evident from visual inspection. Parts other than specified by the manufacturer may not have the same safety characteristics as the recommended replacement parts shown in the Parts List of the Service Manual and may create shock, fire, or other hazards.
- (4) The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.

1.5.1 Warning

- (1) Service should be performed by qualified personnel only.
- (2) This equipment has been designed and manufactured to meet international safety standards.
- (3) It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
- (4) Repairs must be made in accordance with the relevant safety standards.
- (5) It is essential that safety critical components are replaced by approved parts.
- (6) If mains voltage selector is provided, check setting for local voltage.



CAUTION Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of performing repair of this system.

1.6 Preventing static electricity

Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

1.6.1 Grounding to prevent damage by static electricity

Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as CD players.

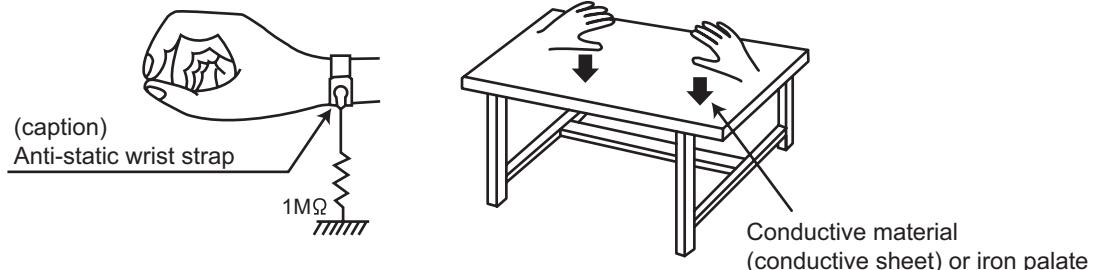
Be careful to use proper grounding in the area where repairs are being performed.

(1) Ground the workbench

Ground the workbench by laying conductive material (such as a conductive sheet) or an iron plate over it before placing the traverse unit (optical pickup) on it.

(2) Ground yourself

Use an anti-static wrist strap to release any static electricity built up in your body.



(3) Handling the optical pickup

- In order to maintain quality during transport and before installation, both sides of the laser diode on the replacement optical pickup are shorted. After replacement, return the shorted parts to their original condition.
(Refer to the text.)
- Do not use a tester to check the condition of the laser diode in the optical pickup. The tester's internal power source can easily destroy the laser diode.

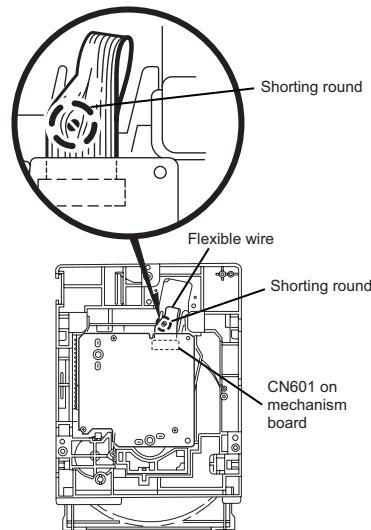
1.7 Handling the traverse unit (optical pickup)

- Do not subject the traverse unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.
- Cut off the shorted part of the flexible cable using nippers, etc. after replacing the optical pickup. For specific details, refer to the replacement procedure in the text. Remove the anti-static pin when replacing the traverse unit. Be careful not to take too long a time when attaching it to the connector.
- Handle the flexible cable carefully as it may break when subjected to strong force.
- It is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it.

1.8 Attention when traverse unit is decomposed

*Please refer to "Disassembly method" in the text for the CD pickup unit.

- Apply solder to the short land sections before the flexible wire is disconnected from the connector CN101 on the CD servo board.
(If the flexible wire is disconnected without applying solder, the CD pickup may be destroyed by static electricity.)
- In the assembly, be sure to remove solder from the short land sections after connecting the flexible wire.



1.9 Important for laser products

1.CLASS 1 LASER PRODUCT

2.DANGER : Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.

3.CAUTION : There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.

4.CAUTION : The compact disc player uses invisible laser radiation and is equipped with safety switches which prevent emission of radiation when the drawer is open and the safety interlocks have failed or are defeated. It is dangerous to defeat the safety switches.

5.CAUTION : If safety switches malfunction, the laser is able to function.

6.CAUTION : Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.



CAUTION Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.

VARNING : Osynlig laserstrålning är denna del är öppnad och spärren är urkopplad. Betrakta ej strålen.

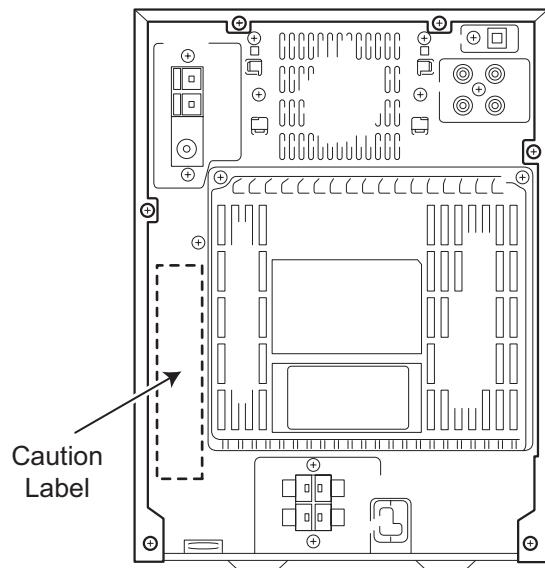
VARO : Avattaessa ja suojalukitus ohittetaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso sääteeseen.

ADVARSEL : Usynlig laserstråling ved åbning , når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

ADVARSEL : Usynlig laserstråling ved åpning,når sikkerhetsbryteren er avslott. unngå utsettelse for stråling.

REPRODUCTION AND POSITION OF LABEL and PRINT

WARNING LABEL and PRINT



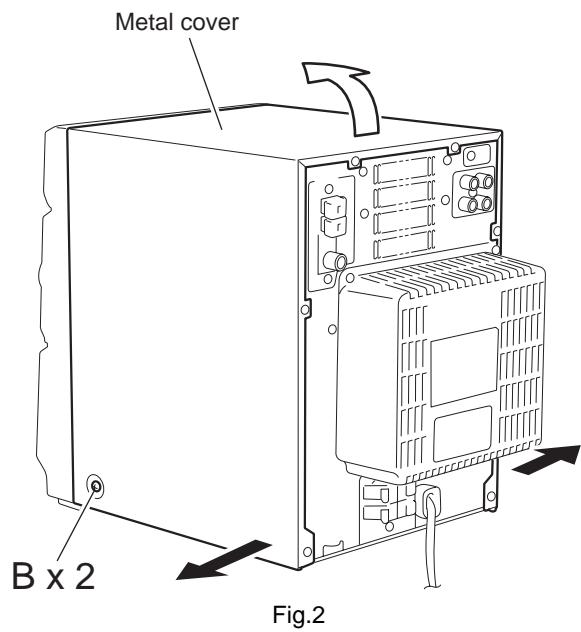
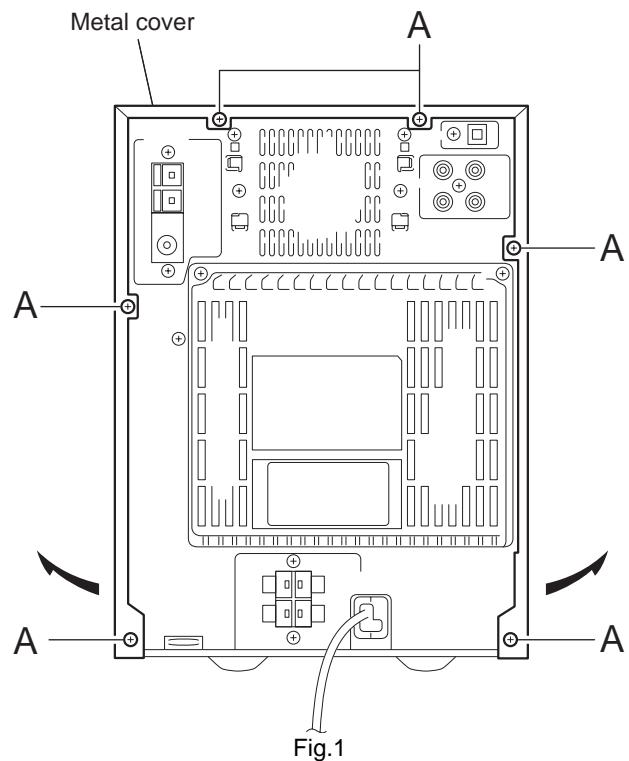
SECTION 2

Disassembly method

2.1 Main body

2.1.1 Removing the metal cover (See Fig.1, 2)

- (1) Remove the six screws **A** on the back of the body.
- (2) Remove the two screws **B** on the side of the body.
- (3) Pull both sides of the metal cover outward and lift the rear part of the cover.



2.1.2 Removing the rear cover

(See Fig.3)

- Prior to performing the following procedure, remove the metal cover.
- (1) Remove the two screws **C** on the back of the body.

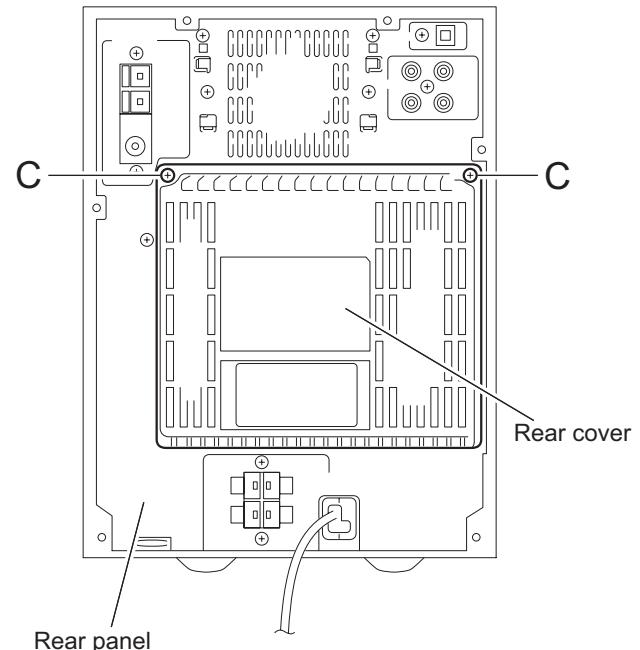


Fig.3

2.1.3 Removing the tuner board

(See Fig.4, 5)

- Prior to performing the following procedure, remove the metal cover.
- (1) Disconnect the card wire from connector CN1 on the tuner board.
- (2) Remove the screw **D** on the right side of the body.
- (3) Remove the two screws **E** on the rear panel.
- (4) Remove the band bundling the wire and pull out the wire through the hole of the CD-R board.

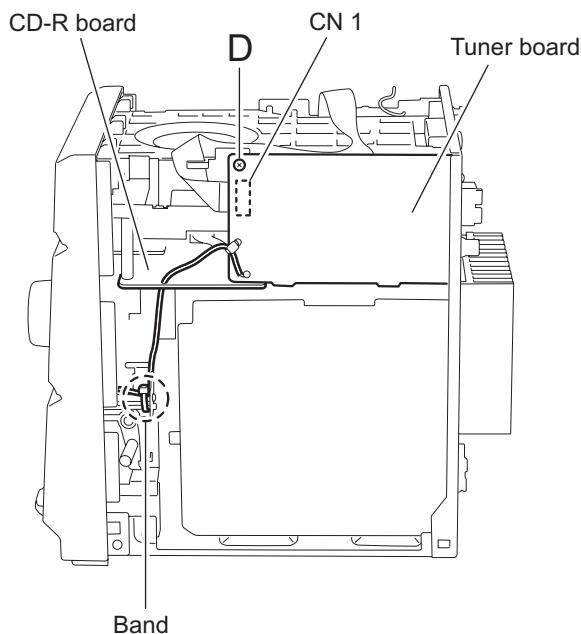


Fig.4

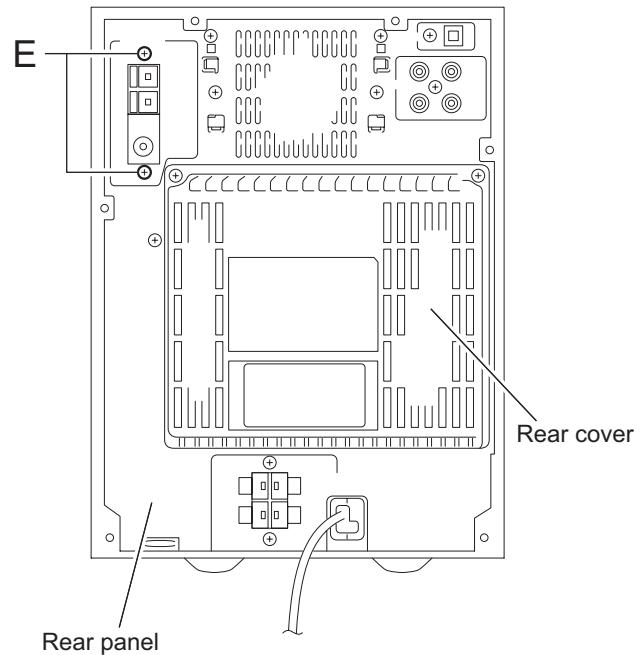


Fig.5

2.1.4 Removing the CD-R mechanism assembly (See Fig.6 ~ 8)

- Prior to performing the following procedure, remove the metal cover and the rear cover.
- Disconnect the card wires from connector CN903, CN904 and the wire from CN905 on the main board on the upper side of the body.
 - Remove the screw **D** attaching the tuner board and the CD-R mechanism on the right side of the body.
 - Remove the two screws **F** attaching the rear panel and the CD-R mechanism on the back of the body.
 - Move the rear part of the CD-R mechanism assembly upwards to disengage the two joints **a** and release from the rear panel.
Pull the front panel toward the front and move the rear part of the CD-R mechanism assembly upwards. Then pull out the CD-R mechanism assembly from the front panel backward.

REFERENCE:

To remove the CD-R mechanism assembly efficiently, disconnect the card wire connecting the tuner board with the main board in advance.

2.1.5 Remove the rear panel (See Fig.8 ~ 11)

- Prior to performing the following procedure, remove the metal cover, rear cover and the CD-R mechanism assembly.
- Remove the seven screws **G** attaching the rear panel.
 - Disconnect the card wire from CN902 on the main board.
 - Disengage the lower two joints **b** on each side of the rear panel using a screwdriver and remove the rear panel backward (The tuner board and the fan will be also detached. Remove them as needed).

2.1.6 Removing the fan (See Fig.9 ~ 12)

- Prior to performing the following procedure, remove the metal cover, the rear cover and the CD-R mechanism assembly.
- Disconnect the wire from connector CN908 on the main board.
 - Remove the two screws **H** on the back of the body.
 - Move the fan upwards to disengage the four joints **c** and release from the rear panel.

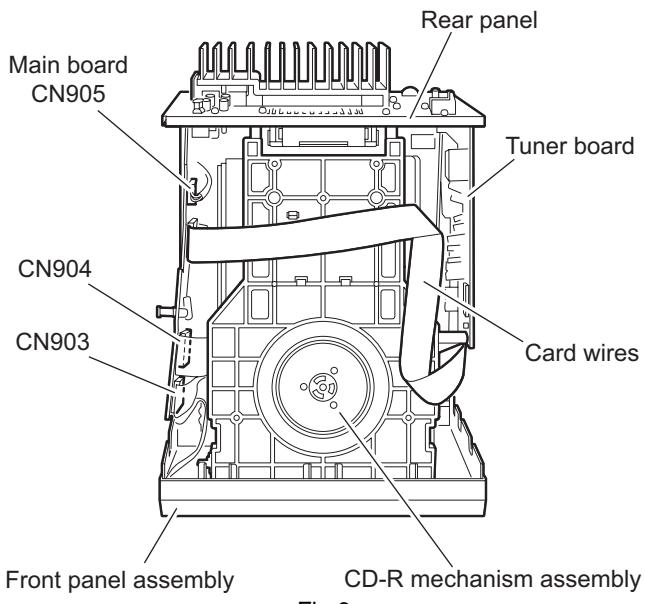


Fig.6

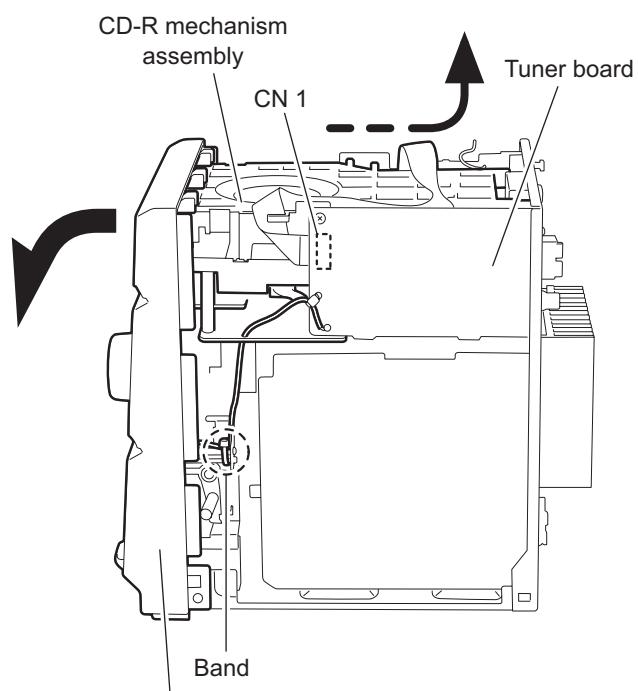
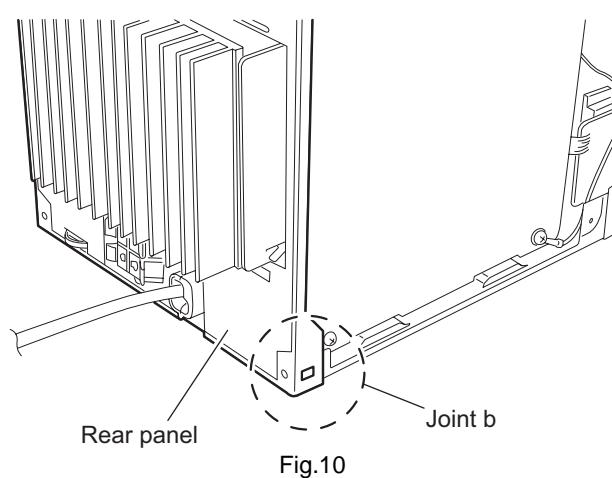
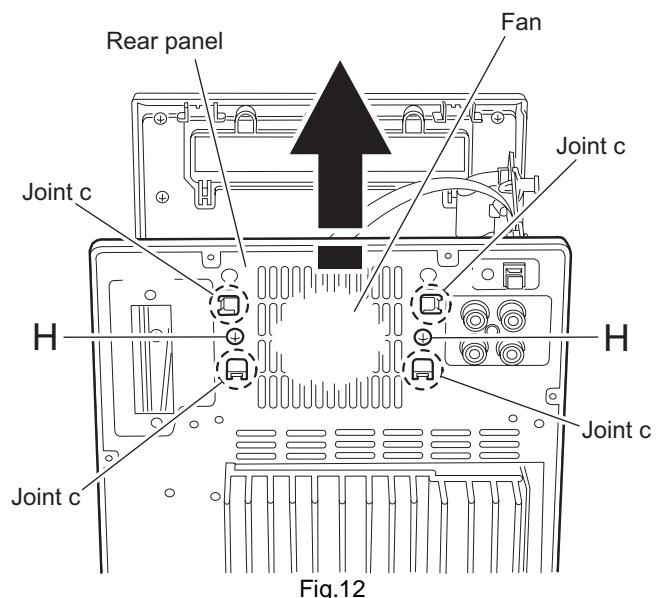
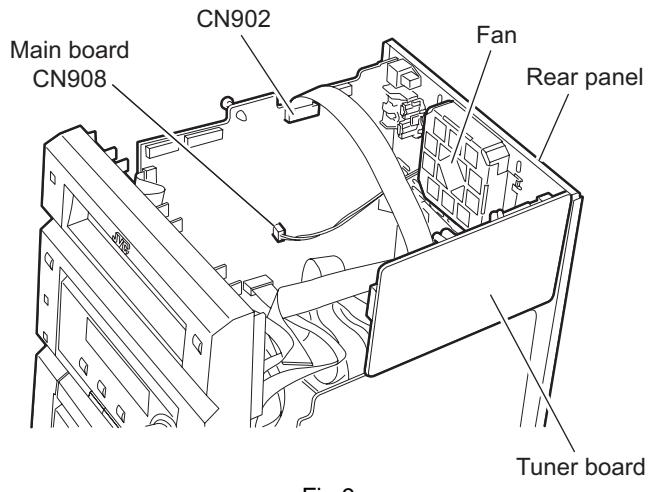
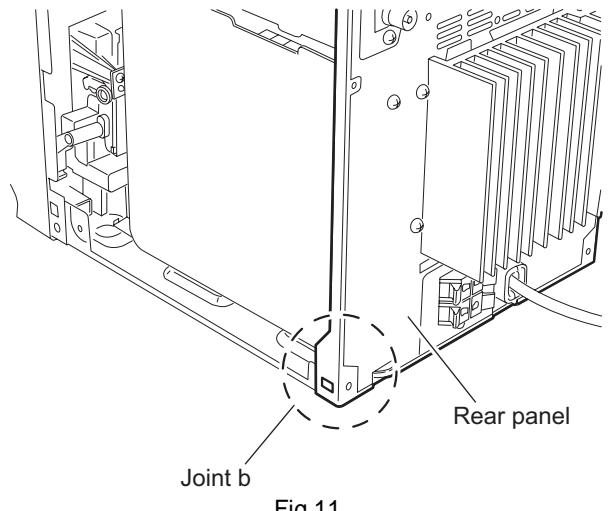
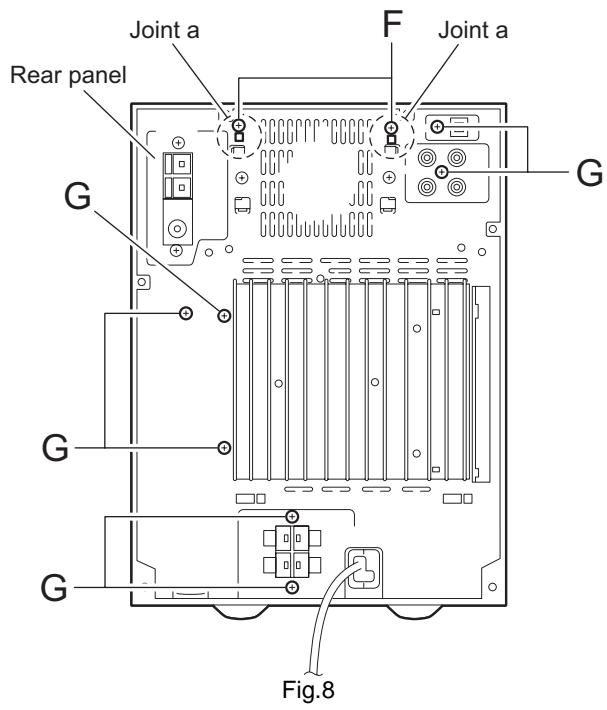


Fig.7



2.1.7 Removing the power amplifier board / power amplifier sub board / main board / heat sink

(See Fig.13 ~ 21)

- Prior to performing the following procedure, remove the metal cover, the rear cover, the CD-R mechanism assembly and the rear panel.

(1) Disconnect the card wire from connector CN900, CN901, CN933 and CN931 on the main board respectively.

(2) Disconnect the wire from connector CN949, CN950 and CN951 on the power supply board.

(3) Remove the two screws I on the right side of the body.

(4) Move the boards and heat sink assembly upwards and disengage the joint d and the two joints e to release the power amplifier board and the main board from the chassis (Refer to Fig.15 , 16).

Move the rear part of the board and heat sink assembly to the right side.

CAUTION:

The wire extending from the lower side of the main board is still connected with the body (Refer to Fig.17).

(5) Disconnect the wire from connector CN906 on the lower side of the main board (Refer to Fig.18).

2.1.8 Removing the power amplifier board

(See Fig.19 ~ 21)

(1) Disconnect the power amplifier board from connector CN941 on the power amplifier sub board.

2.1.9 Removing the power amplifier sub board

(See Fig.19 ~ 21)

(1) Disconnect the two wires from connector CN944, CN945, CN946 and CN947 on the power amplifier sub board.

(2) Remove the two screws J attaching the power amplifier sub board and the heat sink.

2.1.10 Removing the main board

(See Fig.19 ~ 21)

(1) Disconnect the wires from connector CN944, CN945, CN946 and CN947 on the power amplifier sub board.

(2) Remove the two screws K attaching the main board and the heat sink.

REFERENCE:

The power amplifier board, the power amplifier sub board, the main board and the heat sink can be removed respectively.

Front panel assembly

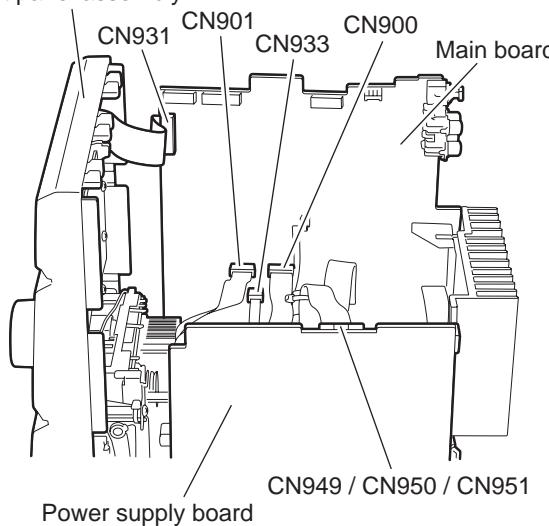
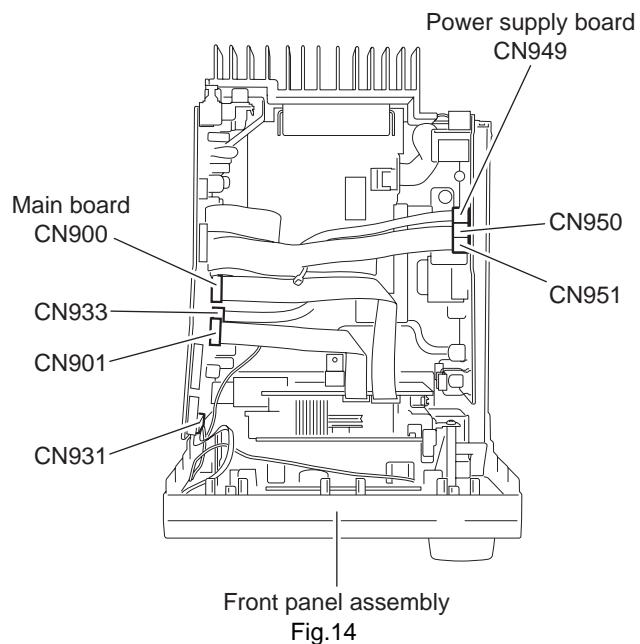


Fig.13



Front panel assembly
Fig.14

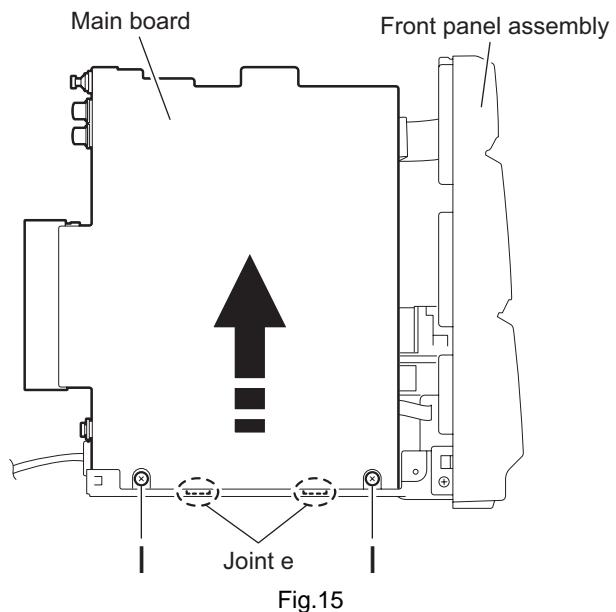


Fig.15

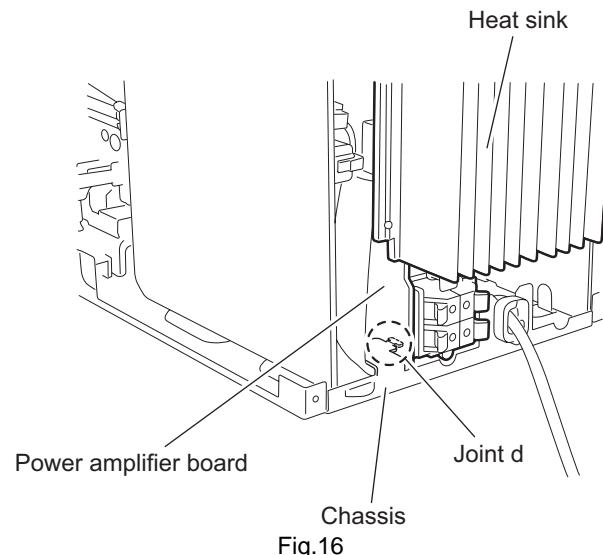


Fig.16

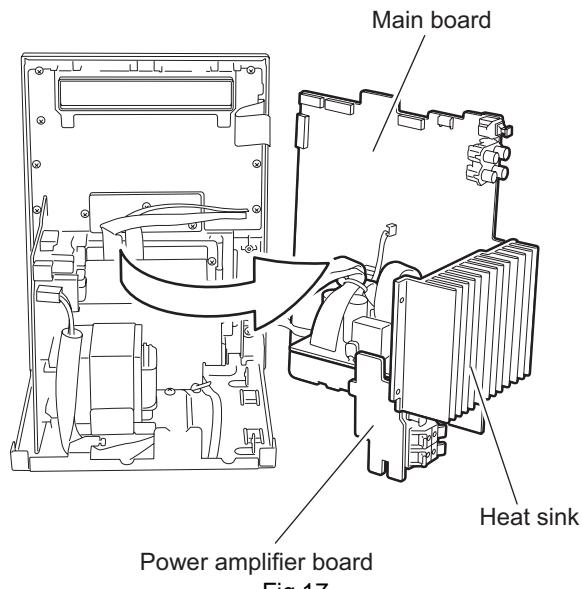


Fig.17

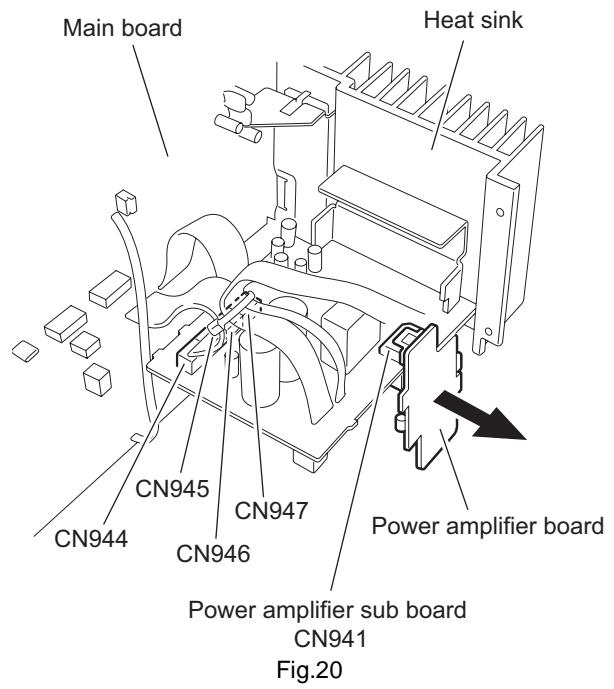


Fig.20

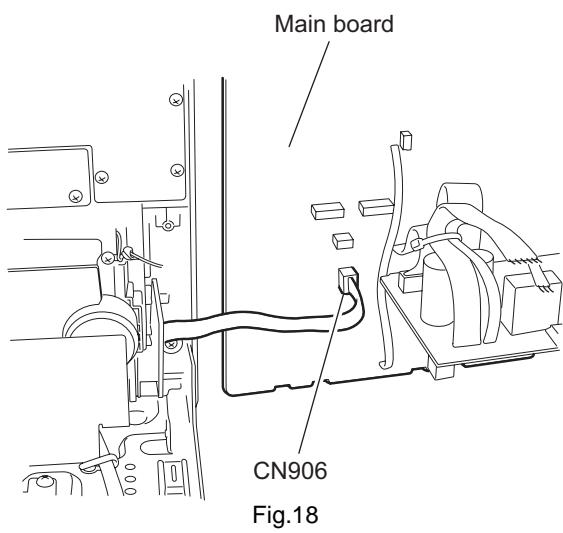


Fig.18

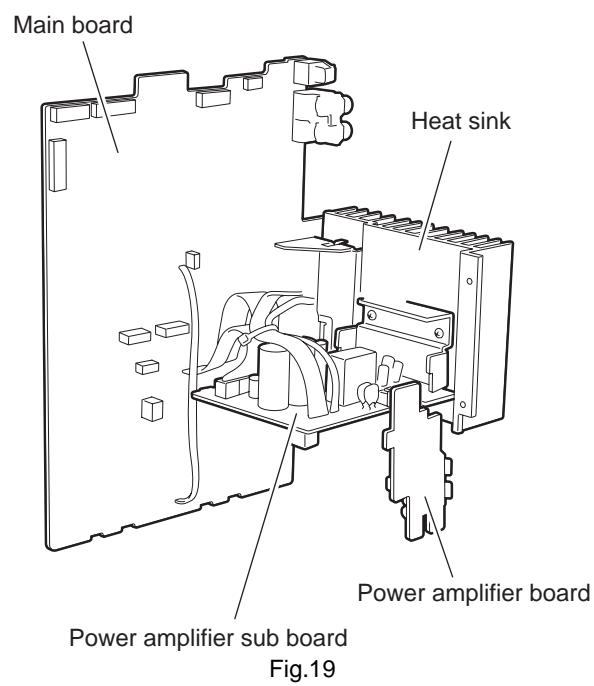


Fig.19

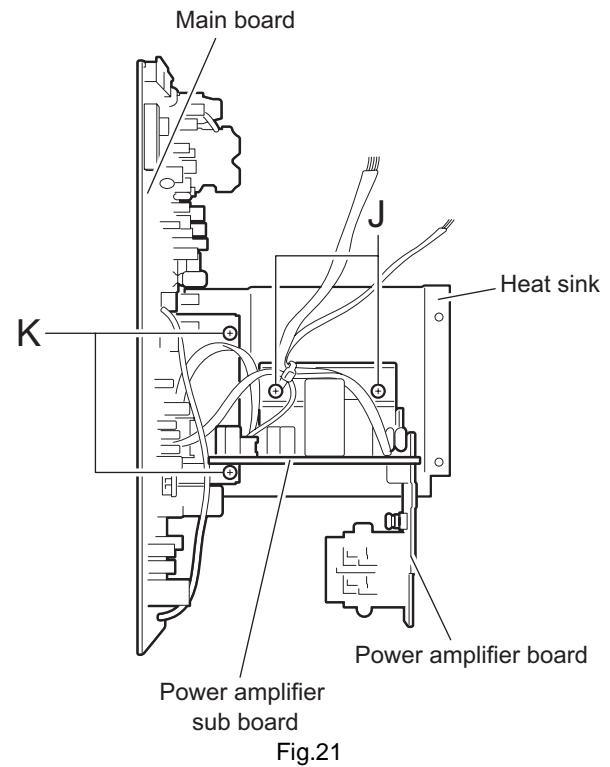


Fig.21

2.1.11 Removing the power transformer assembly

(See Fig.22, 23)

- Prior to performing the following procedure, remove the metal cover, the rear cover, the CD-R mechanism assembly and the rear panel.
- Remove the assembly consisting of the power amplifier board, the power amplifier sub board and the main board from the chassis incompletely (Refer to Fig.17).
 - Remove the cord stopper upwards on the back of the body.
 - Disconnect the power cord from connector J1000 on the board of the power transformer assembly.
 - Remove the four screws **L** attaching the power transformer assembly.

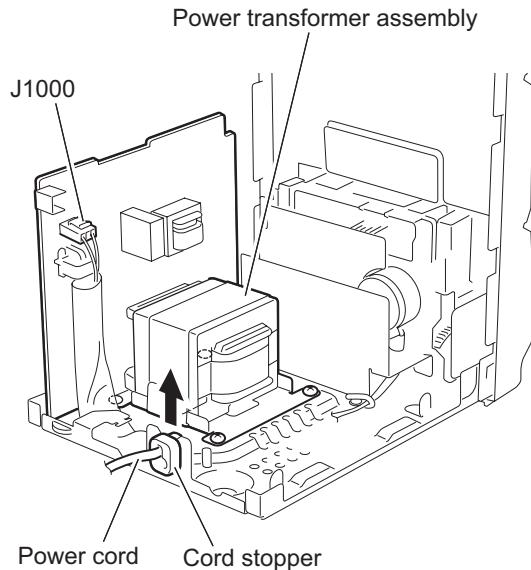


Fig.22

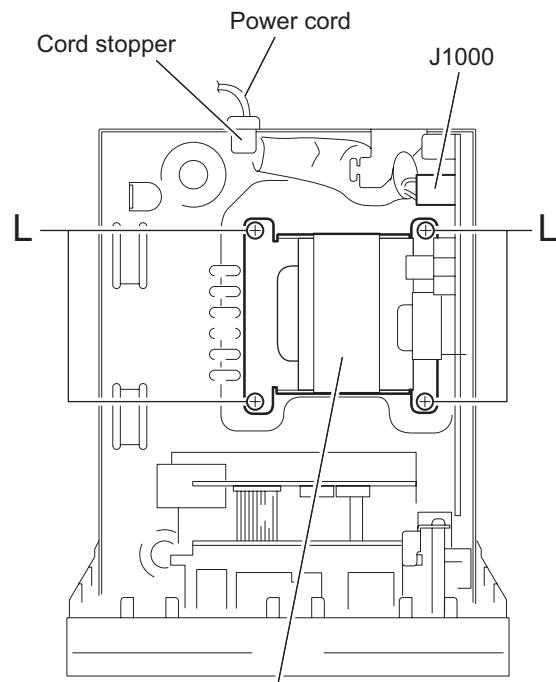


Fig.23

2.1.12 Removing the front panel assembly

(See Fig.24, 25)

- Prior to performing the following procedure, remove the metal cover, the rear cover, the CD-R mechanism assembly and the rear panel.
- Remove the assembly consisting of the power amplifier board, the power amplifier sub board and the main board (Refer to Fig.17, 18).
 - (1) Remove the two screws **M** on each lower side of the body.
 - (2) Disengage the two joints **f** on each lower side of the body using a screwdriver and pull out the front panel assembly toward the front.

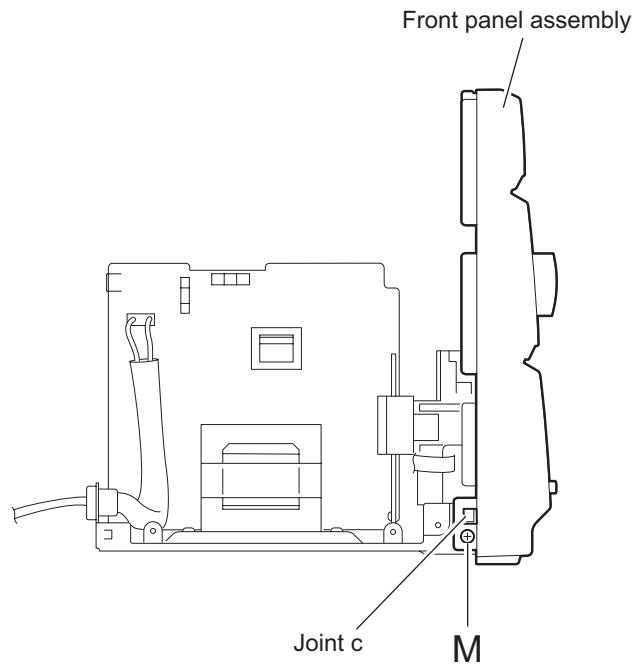


Fig.24

Front panel assembly

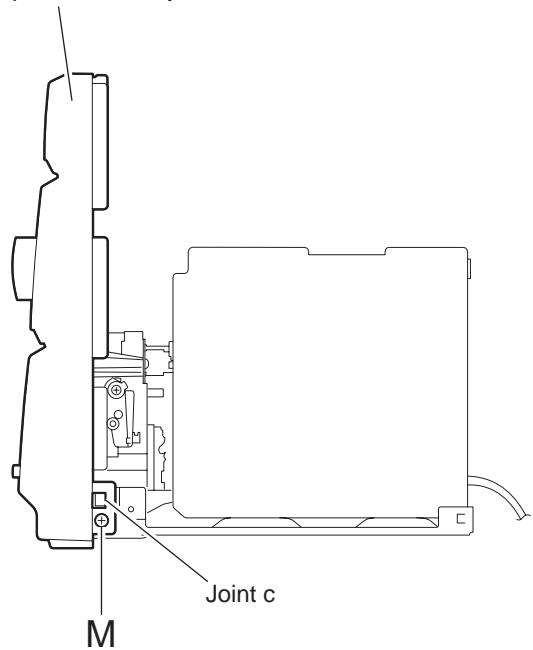


Fig.25

2.1.13 Removing the display board / switch board

(See Fig.26 ~ 28)

- Prior to performing the following procedure, remove the front panel assembly.
- (1) Pull out the VOLUME knob on the front panel.
- (2) Remove the eleven screws **N** on the back of the front panel and remove the display board with the switch board.
- (3) Remove the three screws **O** attaching the switch board to the LCD holder.
- (4) If necessary, unsolder the wire connected to connector FW931 on the display board and FW931 on the switch board.

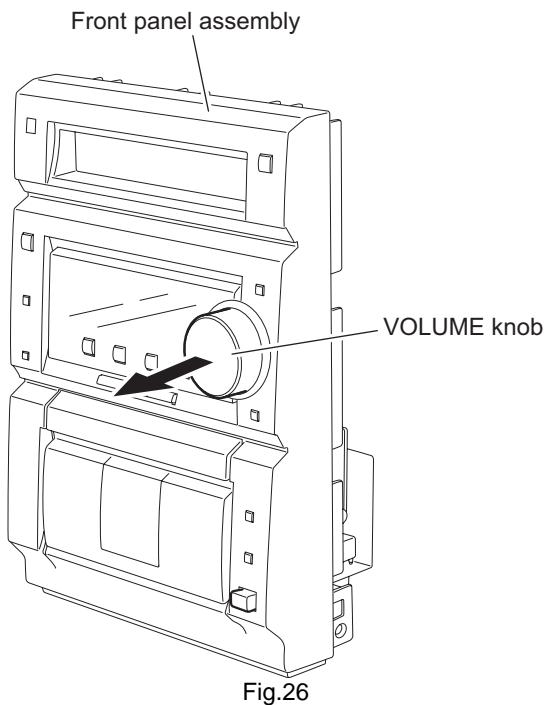


Fig.26

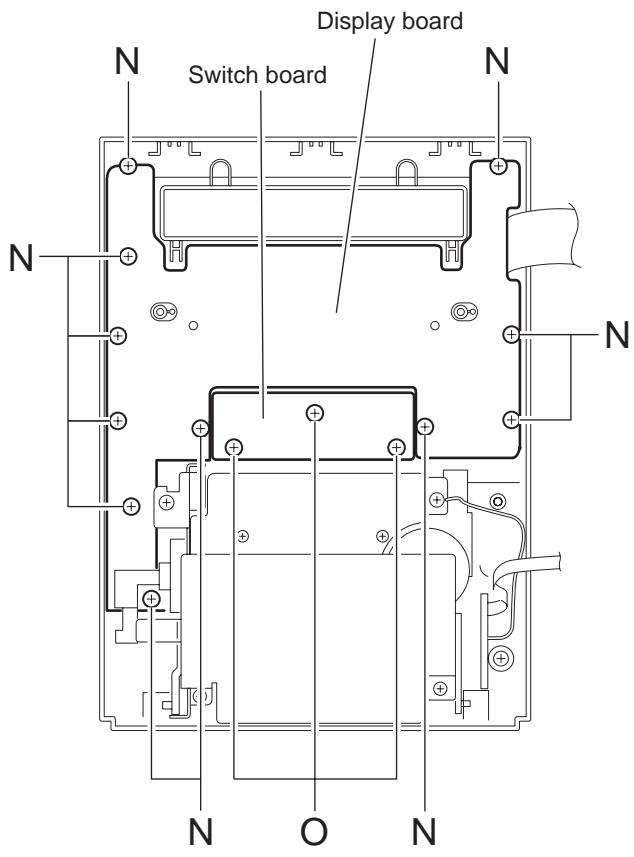


Fig.27

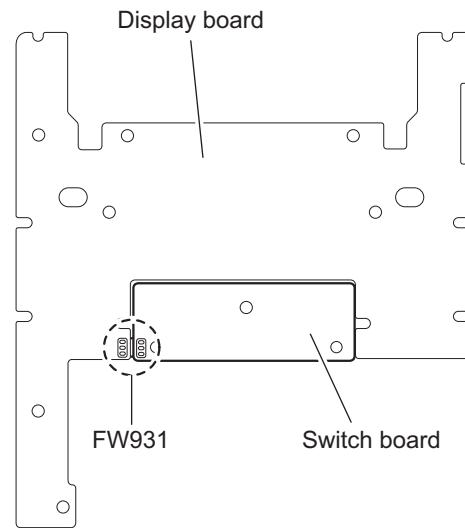


Fig.28

2.1.14 Removing the headphone board

(See Fig.29)

- Prior to performing the following procedure, remove the front panel assembly.

 - Remove the screw **P** on the back of the front panel.
 - If necessary, remove the band bundling the wire extending from the headphone board and the display board.

2.1.15 Removing the cassette mechanism assembly

(See Fig.29, 30)

- Prior to performing the following procedure, remove the front panel assembly.

 - Press the EJECT button on the front panel to open the cassette door.
 - Remove the four screws **Q** on the back of the front panel.

2.1.16 Removing the LED board

(See Fig.30 ~ 32)

- Prior to performing the following procedure, remove the front panel assembly.

 - Press the EJECT button on the front panel to open the cassette door.
 - Remove the cassette holder in the direction of the arrow.
 - Release the two joint hooks **g** engaging the LED board with the cassette door.

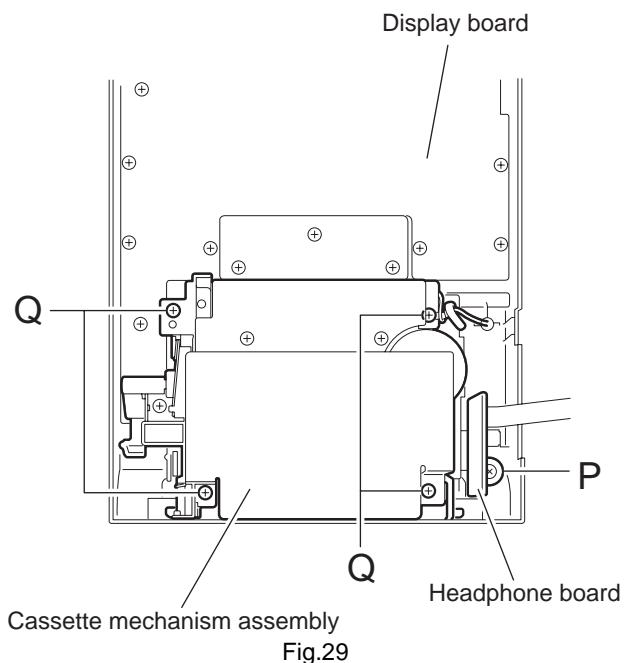


Fig.29

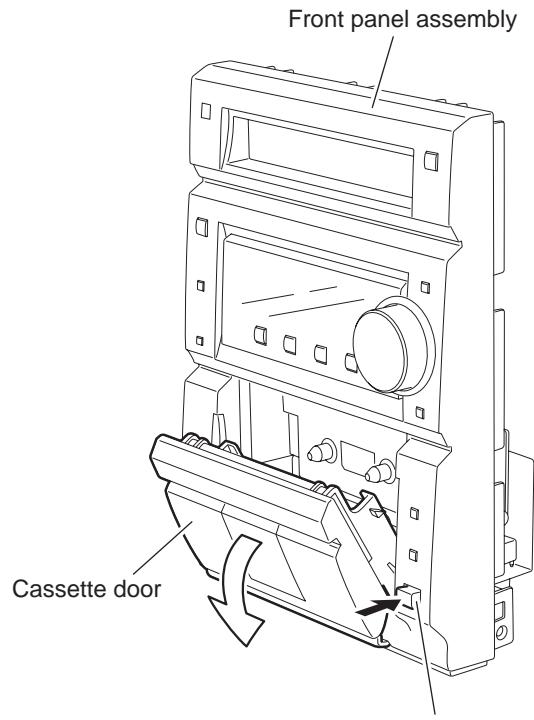


Fig.30

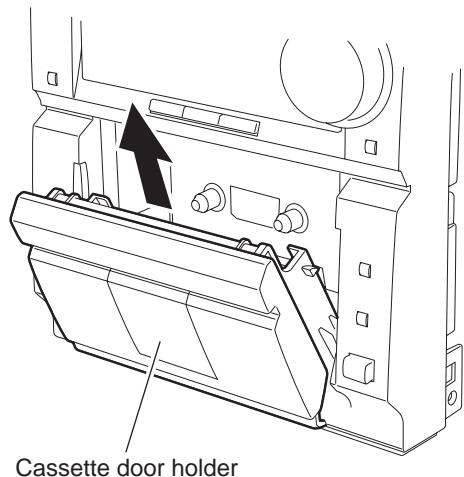


Fig.31

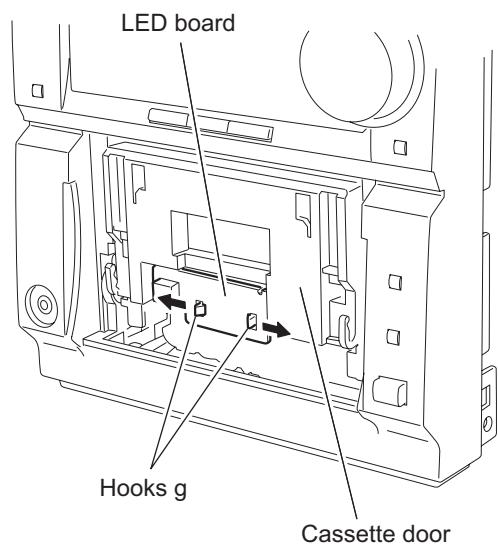


Fig.32

2.2 Cassette mechanism assembly

2.2.1 Removing the playback/recording & eraser head (See Fig.1 to 3)

- (1) While shifting the trigger arm seen on the right side of the head mount in the arrow direction, turn the flywheel (R) in counterclockwise direction until the head mount has gone out with a click (See Fig.1).
- (2) When the flywheel (R) is rotated in counterclockwise direction, the playback/recording & erase head will be turned in counterclockwise direction from the position in Fig.2 to that in Fig.3.
- (3) At this position, disconnect the flexible wire (outgoing from the playback/recording & erase head) from the connector CN31 on the head amplifier & mechanism control board.
- (4) Remove the flexible wire from the fixing point **b** on the chassis base.
- (5) Remove the spring a from behind the playback/recording & erase head.
- (6) Loosen the reversing azimuth screw **A** retaining the playback/recording & erase head.
- (7) Take out the playback/recording & erase head from the front of the head mount.

2.2.2 Reassembling the playback/recording & eraser head

- (1) Reassemble the playback/recording & eraser head from the front of the head mount to the position as shown in Fig.3.
- (2) Fix the reversing azimuth screw **A**.
- (3) Attach the spring a from behind the playback/recording & eraser head.
- (4) Attach the flexible wire to the fixing point **b** on the chassis base.
- (5) Attach the flexible wire (outgoing from the playback/recording & eraser head) to the connector CN31 on the head amplifier & mechanism control board.

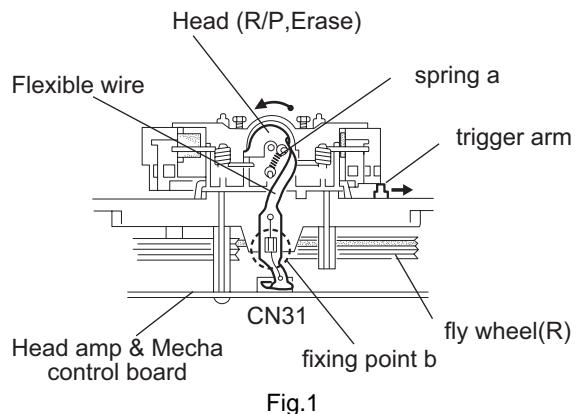


Fig.1

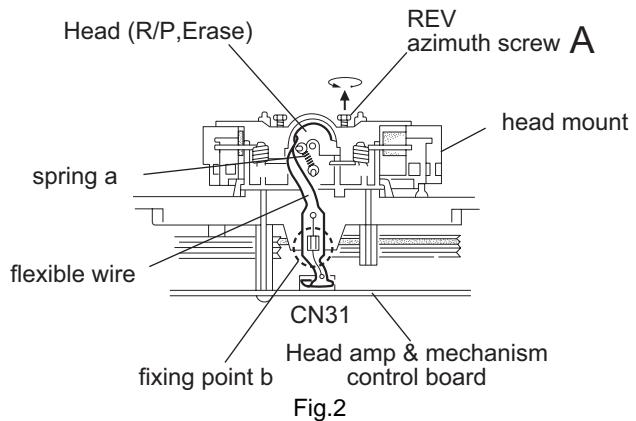


Fig.2

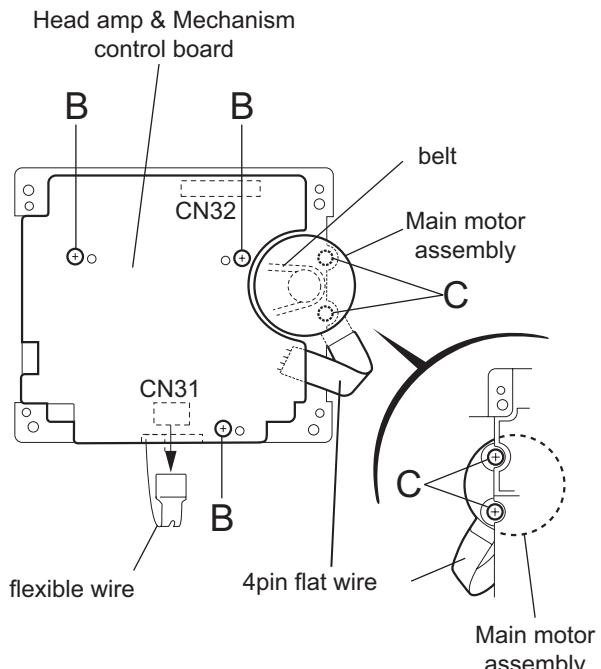


Fig.3

2.2.3 Removing the head amplifier & mechanism control board

(See Fig.4 and 5)

- (1) Remove the flexible wire from the connector CN31 on the head amplifier & mechanism control board on the rear of the cassette mechanism assembly.
- (2) Remove the three screws **B** retaining the head amplifier & mechanism control board.
- (3) Disconnect the connector CN 32 on the head amplifier & mechanism control board from the connector CN1 on the reel pulse board, and remove the head amplifier & mechanism control board.

Note:

When necessary, remove the 4 pin parallel wire soldered to the main motor.

2.2.4 Removing the main motor

(See Fig.4 to 7)

- Prior to the following procedure, it is not necessary to remove the head amplifier & mechanism control board.
- (1) Remove the two screws **C** retaining the main motor.
- (2) While raising the main motor, remove the capstan belt from the motor pulley.

CAUTION:

Be sure to handle the capstan belt so carefully that this belt will not be stained by grease and so on. Moreover, this belt should be hanged while referring to the capstan belt hanging method in Fig. 6 and 7.

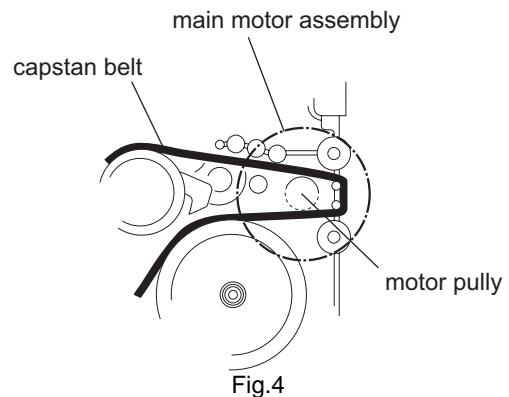


Fig.4

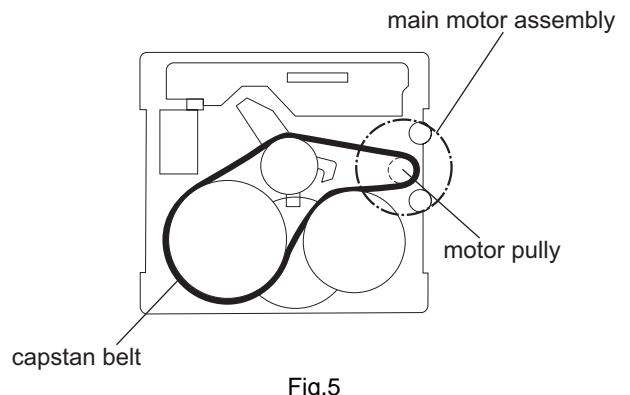


Fig.5

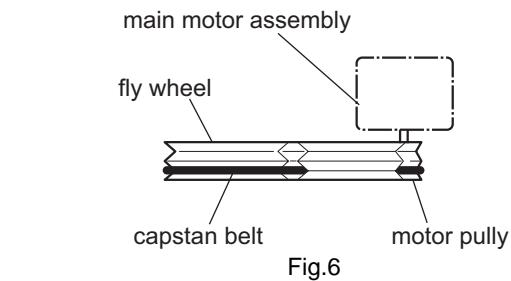


Fig.6

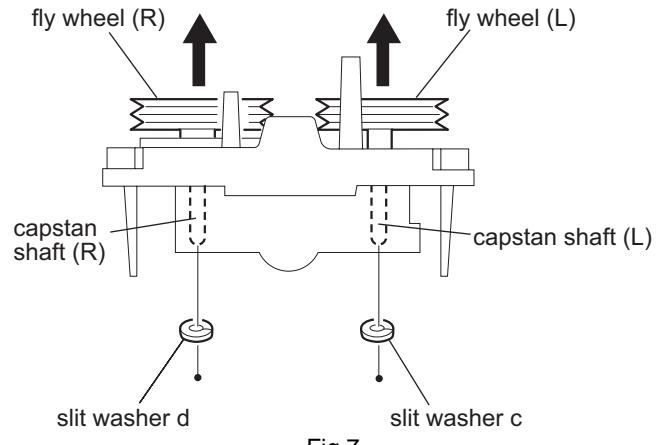


Fig.7

2.2.5 Removing the flywheel

(See Fig.8 and 9)

- Prior to the following procedure, remove the head amplifier &mechanism control board.
- Prior to the following procedure, remove the main motor assembly.
- (1) Remove the slit washers c and d fixing the capstan shafts (L) and (R) from the front of the cassette mechanism assembly. And pull out the flywheels (L) and (R) respectively from the rear of the cassette mechanism assembly in the arrow direction. Then, remove the flywheels (L) and (R).

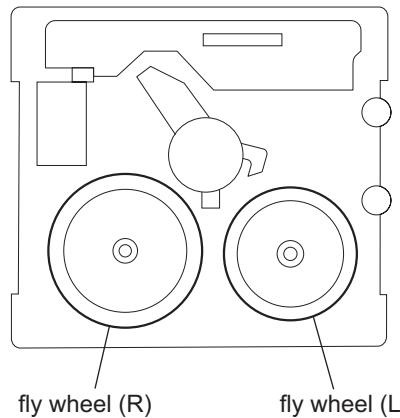


Fig.8

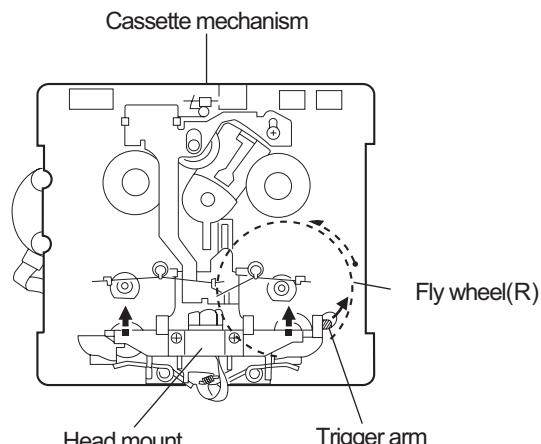


Fig.9

2.2.6 Removing the reel pulse board and solenoid

(See Fig.10)

- Prior to the following procedure, remove the head amplifier &mechanism control board.
- Prior to the following procedure, remove the main motor assembly.
- (1) Remove one screw D attaching the reel pulse board.
- (2) Remove the five fixing points e attaching the reel pulse board respectively in the arrow direction.
- (3) From the front of the cassette mechanism assembly, push the two fixing points f retaining the solenoid in the arrow direction, and remove the solenoid.

Note:

When reassembly, make sure that the fixing point g of the solenoid is attached properly.

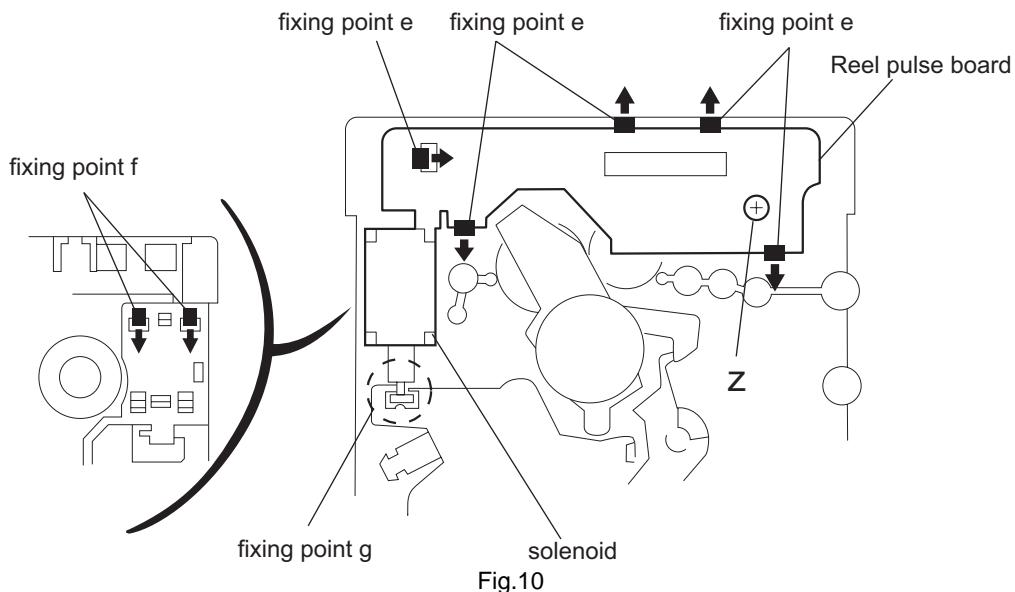


Fig.10

SECTION 3

Adjustment

3.1 Adjustment method

■ Measurement Instruments Required for Adjustment

1. Low frequency oscillator

This oscillator should have a capacity to output 0dBs to 60Ω at an oscillation frequency of 50Hz-20kHz.

2. Attenuator impedance : 600Ω

3. Electronic voltmeter

4. Distortion meter

5. Frequency counter

6. Wow & flutter meter

7. Test tape

VT703L : Head azimuth

VT712 : Tape speed and running unevenness (3kHz)

VT724 : Reference level (1kHz)

8. Blank tape

TYPE I : AC-225

TYPE II : AC-514

9. Torque gauge : For play and back tension

FWD(TW2111A), REV(TW2121a) and

FF/REW(TW2231A)

10. Test disc: CTS-1000

■ Measurement conditions

Power supply voltage

AC 230V ~ , 50Hz

Reference output : Speaker : 0.775V/4Ω

: Headphone : 0.077V/32Ω

Reference frequency and

input level ----- 1kHz, AUX : -8dBs

Measurement output terminal ----- at Speaker J3002

※ Load resistance ----- 4Ω

● Tuner section

FM tuning range: 87.5MHz~108.00MHz

AM tuning range: 522kHz~1,629kHz

Voltage applied to tuner ----- +B : DC5.7V
VT : DC 12V

Reference measurement

output ----- 26.1mV(0.28V)/3Ω

Input positions ----- AM : Standard loop antenna
FM : TP1 (hot) and TP2 (GND)

● Standard measurement position of volume

Function switch ----- to Tape
Beat cut switch ----- to Cut
Super Bass/Active hyper Bass ----- to OFF
Bass Treble ----- to Center
Adjustment of main volume to reference output
VOL : 28

Precautions for measurement

1. Apply 30pF and 33kΩ to the IF sweeper output side and 0.082 μ F and 100kΩ in series to the sweeper input side.
2. The IF sweeper output level should be made as low as possible within the adjustable range.
3. Since the IF sweeper is a fixed device, there is no need to adjust this sweeper.
4. Since a ceramic oscillator is used, there is no need to perform any MIX adjustment.
5. Since a fixed coil is used, there is no need to adjust the FM tracking.
6. The input and output earth systems are separated. In case of simultaneously measuring the voltage in both of the input and output systems with an electronic voltmeter for two channels, therefore, the earth should be connected particularly carefully.
7. In the case of BTL connection amp., the minus terminal of speaker is not for earthing. Therefore, be sure not to connect any other earth terminal to this terminal. This system is of an BTL system.
8. For connecting a dummy resistor when measuring the output, use the wire with a greater code size.
9. Whenever any mixed tape is used, use the band pass filter (DV-12).

● Radio Input signal

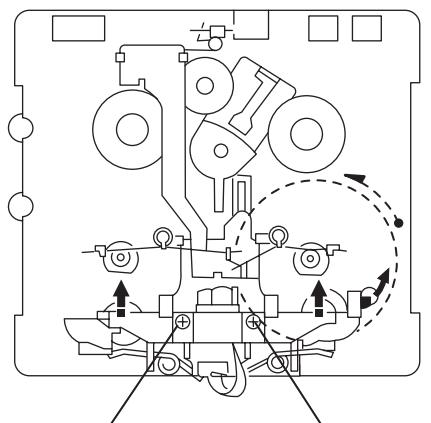
AM frequency ----- 400Hz

AM modulation ----- 30%

FM frequency ----- 400Hz

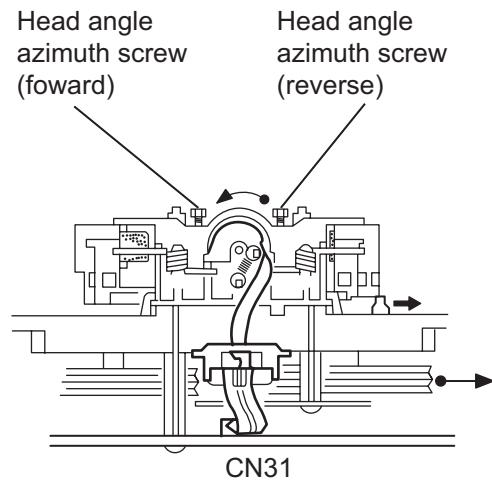
FM frequency deviation ----- 22.5kHz

3.2 Cassette mechanism section



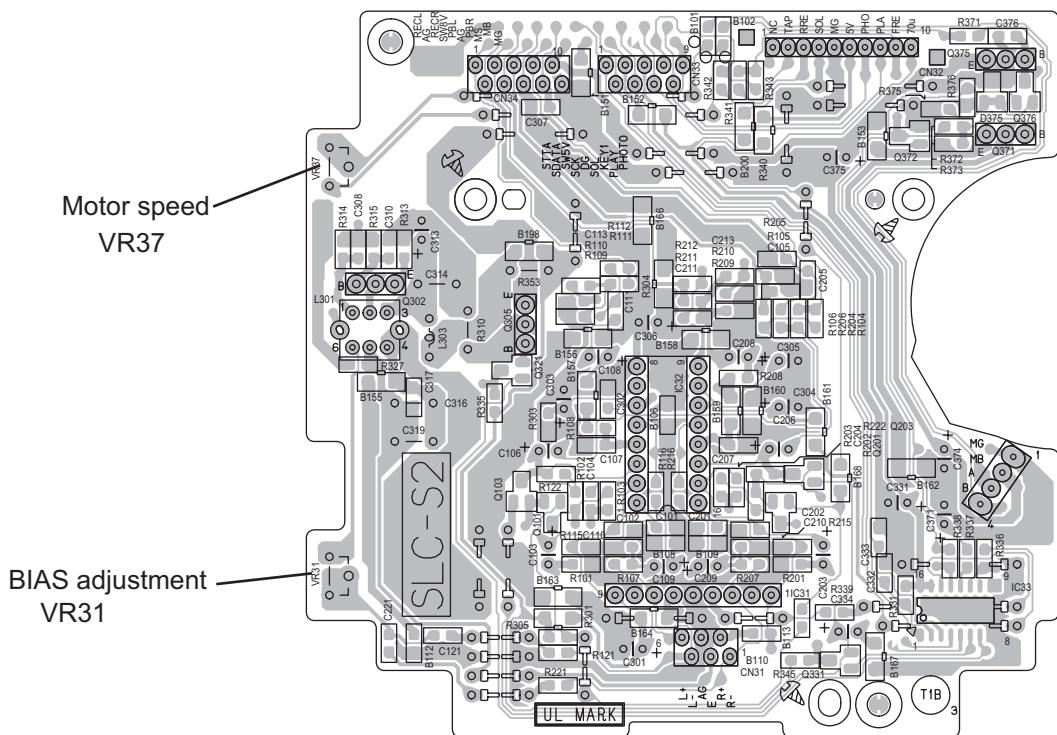
Head angle azimuth screw (foward)

Head angle azimuth screw (reverse)



Recording and play head/Erase head

Mechanism control P.C. board



Motor speed
VR37

BIAS adjustment
VR31

3.3 Mechanism section

Item	Confirmation of angle of head	Tape speed confirmation
Mesurement condition	Test tape: VT703L (8kHz) Measurement output terminal: Speaker terminal	Test tape: VT712 (3kHz) Measurement output terminal: Speaker terminal or headphone terminal
Mesurement procedure	1.Test tape VT703L (8kHz) is played. 2.It is adjusted that becomes an output that both are the maximum on a forward side and a reverse side with the screw for the azimuth adjustment. 3.This adjustment is adjusted respectively with the adjustment screw for the forward side and the adjustment screw for a reverse side.	Test tape VT712(3kHz) of the forward is reproduced by finishing rolling , and adjusted for the display of the frequency counter to become 2,940-3,090Hz by VR37.
Standard value	The maximum output	2,940 ~ 3,090Hz
Adjustment position	Only when the head is exchanged, adjusts.	VR37

3.4 Reference and standard value of confirmation matter

Item	Forward/reverse tape speed difference	Wow & flutter
Mesurement condition	Test tape: VT712 (3kHz) Measurement output terminal: Speaker terminal or headphone terminal	
Mesurement procedure	Both reverse must forward/reproduce, and the speed difference must be 6.0Hz or less as for finish wrapping of test tape VT712 (3kHz).	Both reverse must forward/reproduce, and each wow & flutter must be 0.25% (WRMS) or less as for begin to wrap of test tape VT712 (3kHz).
Standard value	6.0Hz or less	0.25% or less (WRMS)
Adjustment position	VR31	

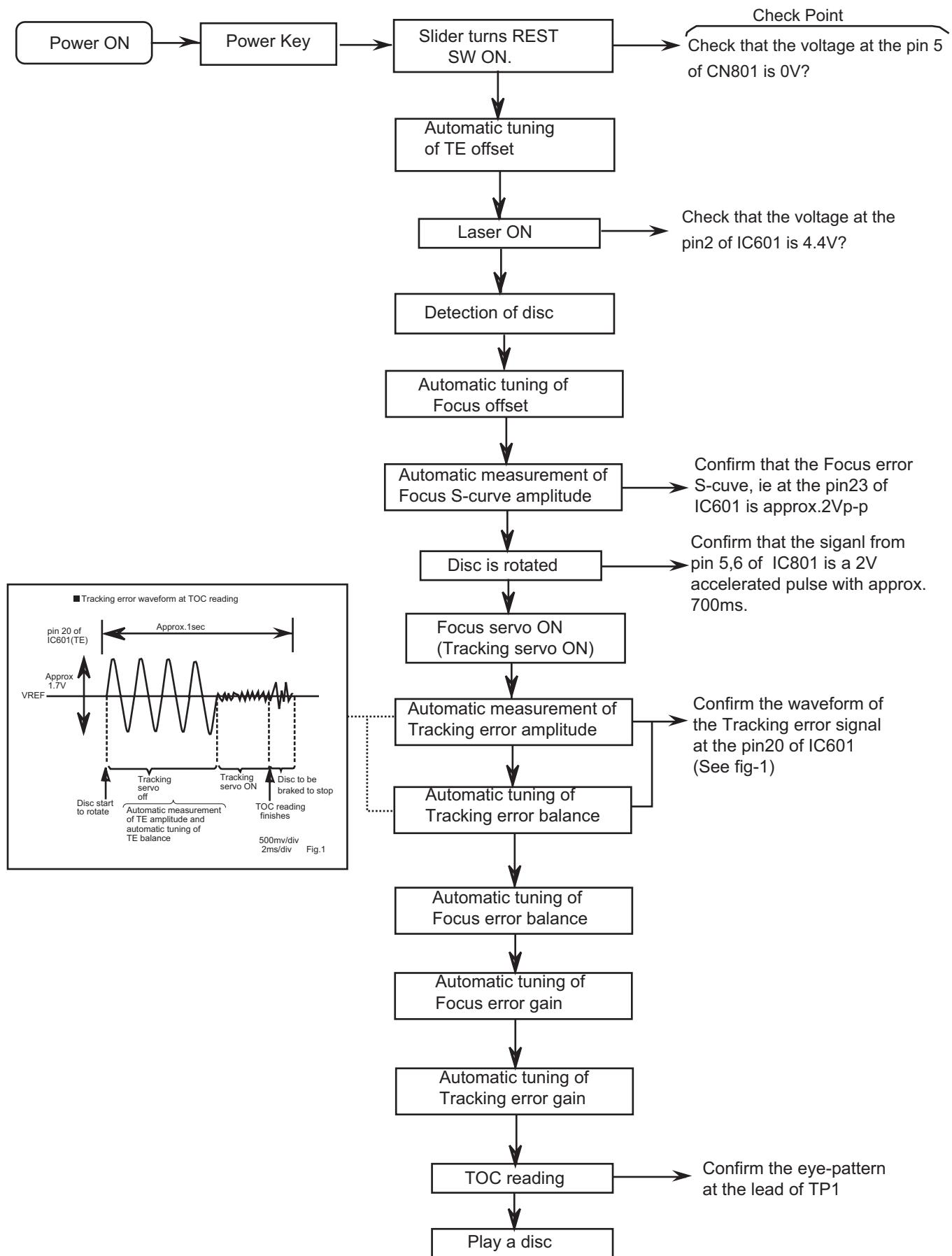
3.5 Electric adjustment

Item	Recording BIAS adjustment	Recording reproduction frequency characteristic
Measurement condition	Forward or reverse Test tape: AC-514 TYPE II and AC-225 TYPE I Measurement output terminal: Recording and headphone terminal	Standard frequency: 1kHz/10kHz (Standard: -20dB) Test tape: AC-514 TYPE II Measurement input terminal: OSC IN
Measurement procedure	1.Test tape (AC-514 TYPE II ,AC-225 TYPE I)is installed, and makes to recording/pose. 2.Connects in the head for the recording and to connect 100 with the series and to measure the current of the bias, connects with VTVM. 3.The pose is released after sets and the recording begins. It is adjusted that the current of the bias reaches the following value by VR31 for L side at this time and VR32 for R side. 4.0 μ A (TYPE I)and4.20 μ A (TYPE II)	1.Test tape (AC-514 TYPE II)is installed, and makes to recording/pose. 2.Records the recording's releasing the pose, beginning, and repeating 1kHz and 10kHz of a standard frequency from the frequency transmitter. 3.VR31 for L side and VR32 for R side are adjusted so that the recorded part may be reproduced and there is a difference between 1kHz and 10kHz in 1dB }2dB, and the recording is repeated again.
Standard value	AC-225: 4.20 μ A AC-514: 4.0 μ A	Output difference 1kHz/10kHz:-1dB ± 2dB
Adjustment position	VR31	

3.6 Electric characteristic confirmation

Item	Current of recording bias	Deletion current (standard value)
Measurement condition	Forward or reverse Test tape: AC-514 TYPE II Measurement terminal: BIAS TP on P.C.board	Forward or reverse State of recording Test tape: AC-514 TYPE II and AC-225TYPE I Measurement terminal: Erase head's both ends
Measurement procedure	1. It is confirmed that BIAS1 and 2 are switched, and the frequency changes. 2.Test tape (AC-514 TYPE) is installed, and recording/makes to the pose. 3.It is confirmed that it is BIAS TP on the substrate and the frequency is 100Hz ± 6kHz.	1.Test tape (AC-514 TYPE II)is installed, and makes to recording/pose. 2.The pose is released and after sets in the state of the recording, 1W is confirmed, and connects with the series, and the deletion current is confirmed from erase head's both ends to the erase head.
Standard value	100kHz ± 6kHz	TYPE II : 120mA TYPE I : 75mA
Adjustment position		

3.7 Flow of functional operation until TOC read (CD)



3.8 Maintenance of laser pickup (CD)

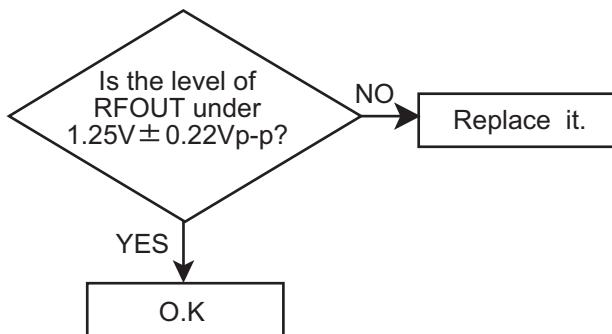
(1) Cleaning the pick up lens

Before you replace the pick up, please try to clean the lens with a alcohol soaked cotton swab.

(2) Life of the laser diode

When the life of the laser diode has expired, the following symptoms will appear.

- The level of RF output (EFM output : amplitude of eye pattern) will below.



(3) Semi-fixed resistor on the APC PC board

The semi-fixed resistor on the APC printed circuit board which is attached to the pickup is used to adjust the laser power. Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor.

If the laser power is lower than the specified value, the laser diode is almost worn out, and the laser pickup should be replaced.

If the semi-fixed resistor is adjusted while the pickup is functioning normally, the laser pickup may be damaged due to excessive current.

3.9 Replacement of laser pickup (CD)

Turn off the power switch and, disconnect the power cord from the ac outlet.

Replace the pickup with a normal one.(Refer to "Pickup Removal" on the previous page)

Plug the power cord in, and turn the power on. At this time, check that the laser emits for about 3seconds and the objective lens moves up and down.
Note: Do not observe the laser beam directly.

Play a disc.

Check the eye-pattern at TP1.

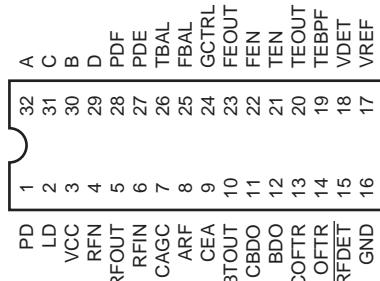
Finish.

SECTION 4

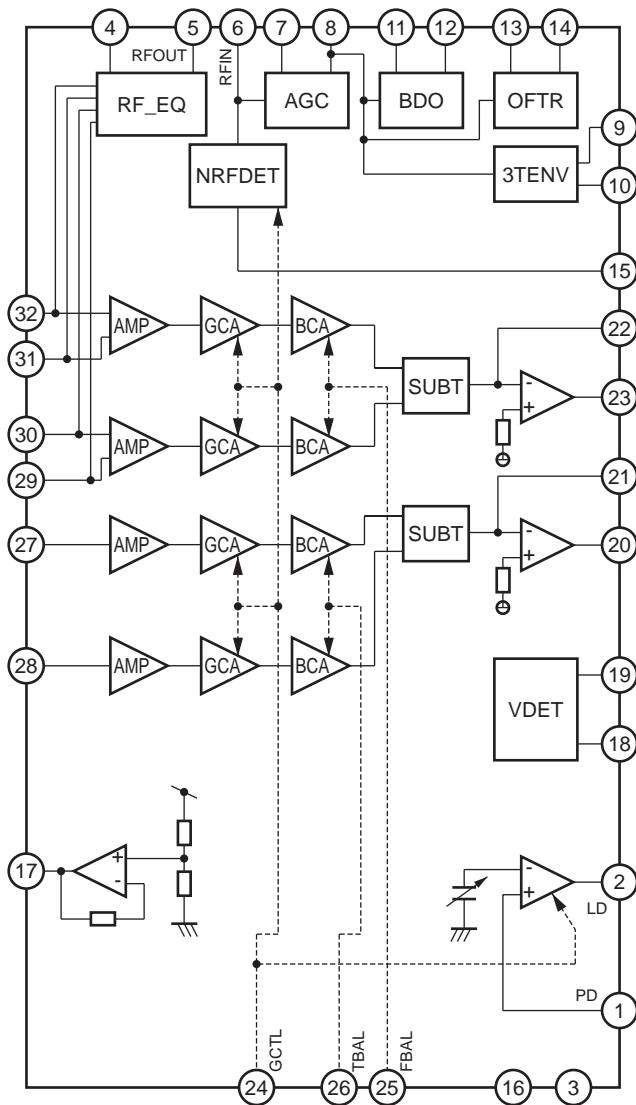
Description of major ICs

4.1 AN22000A-W (IC601) : RF head amp.

- Terminal layout



- Block diagram

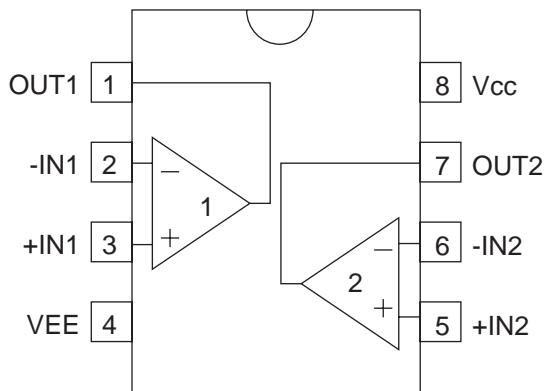


- Pin function

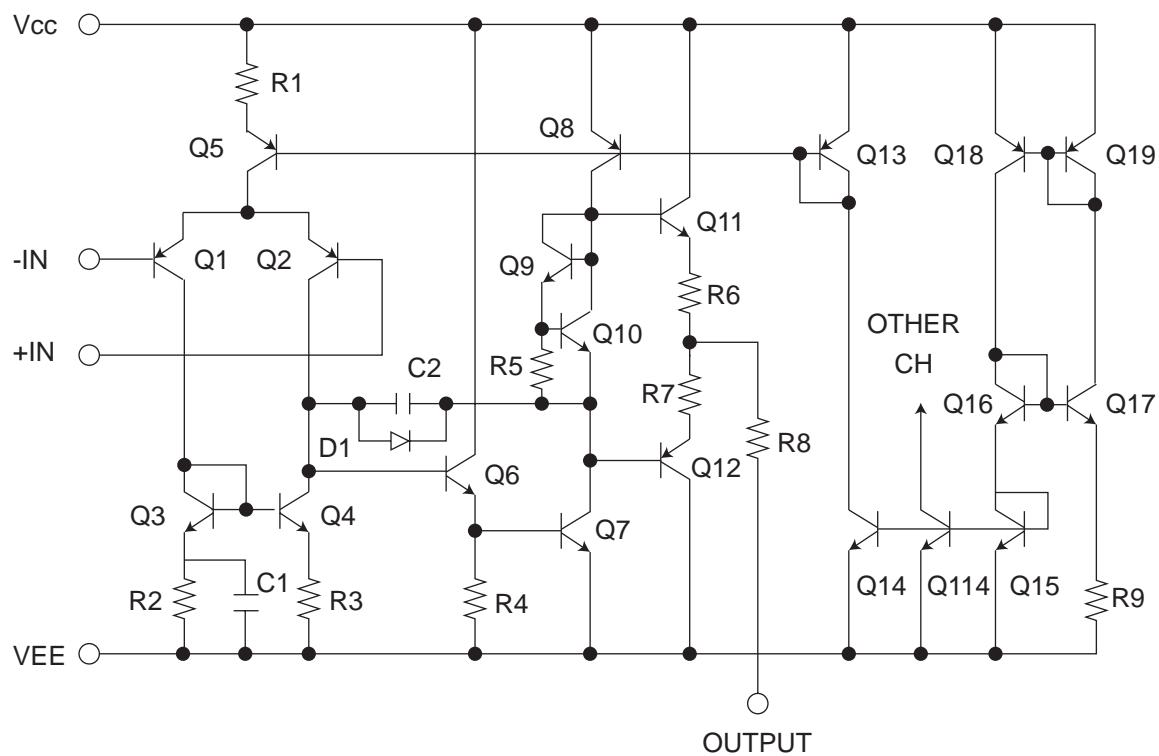
Pin No.	Symbol	I/O	Function
1	PD	I	APC Amp. input terminal
2	LD	O	APC Amp. output terminal
3	VCC	-	Power supply terminal
4	RFN	I	RF adder Amp. inverting input terminal
5	RFOUT	O	RF adder Amp. output terminal
6	RFIN	I	AGC input terminal
7	CAGC	I	Input terminal for AGC loop filter capacitor
8	ARF	O	AGC output terminal
9	CEA	I	Capacitor connecting terminal for HPF-Amp.
10	3TOUT	O	3 TENV output terminal
11	CBDO	I	Capacitor connecting terminal for envelope detection on the darkness side
12	BDO	O	BDO output terminal
13	COFTR	I	Capacitor connecting terminal for envelope detection on the light side
14	OFTR	O	OFTR output terminal
15	NRFDET	O	NRFDET output terminal
16	GND	-	Ground
17	VREF	O	VREF output terminal
18	VDET	O	VDET output terminal
19	TEBPF	I	VDET output terminal
20	TEOUT	O	TE Amp. output terminal
21	TEN	I	TE Amp. inverting input terminal
22	FEN	I	FE Amp. inverting input terminal
23	FEOUT	O	FE Amp. output terminal
24	GCTL	O	GCTL & APC terminal
25	FBAL	O	FBAL control terminal
26	TBAL	O	TBAL control terminal
27	E	I	Tracking signal input terminal 1
28	F	I	Tracking signal input terminal 2
29	D	I	Focus signal input terminal 4
30	B	I	Focus signal input terminal 3
31	C	I	Focus signal input terminal 2
32	A	I	Focus signal input terminal 1

4.2 BA15218F-XE (IC904) : Dual operation amplifier

- Pin layout

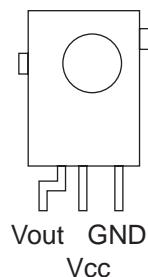


- Block diagram

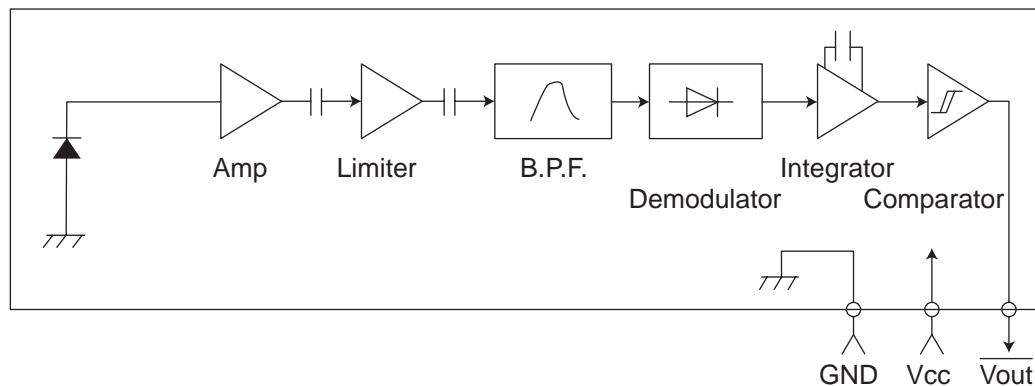


4.3 GP1U261X (IC933) : Receiver

- Pin layout

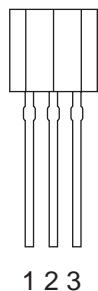


- Block diagram

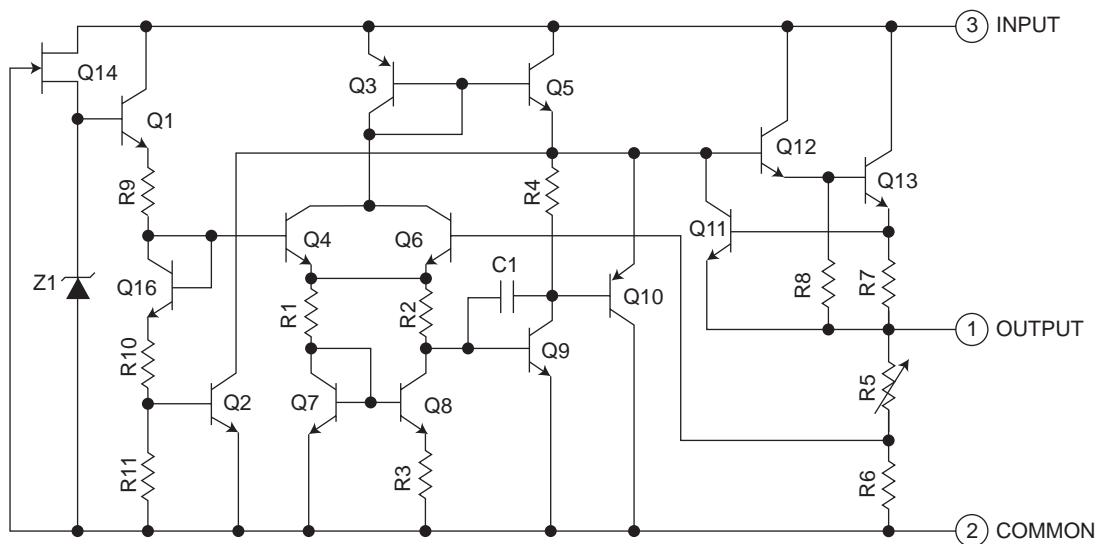


4.4 KIA78S06P-T (IC932) : Regulator

- Pin layout

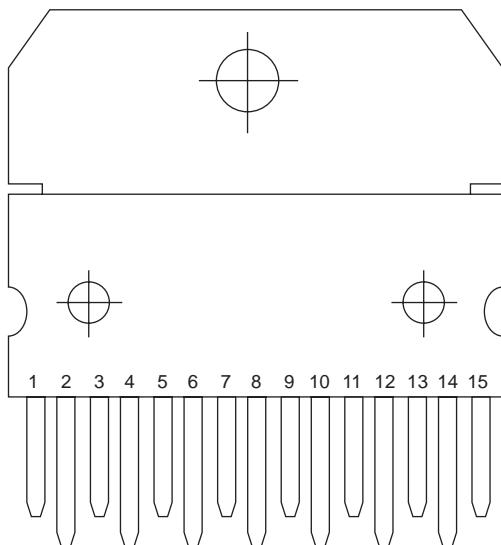


- Block diagram

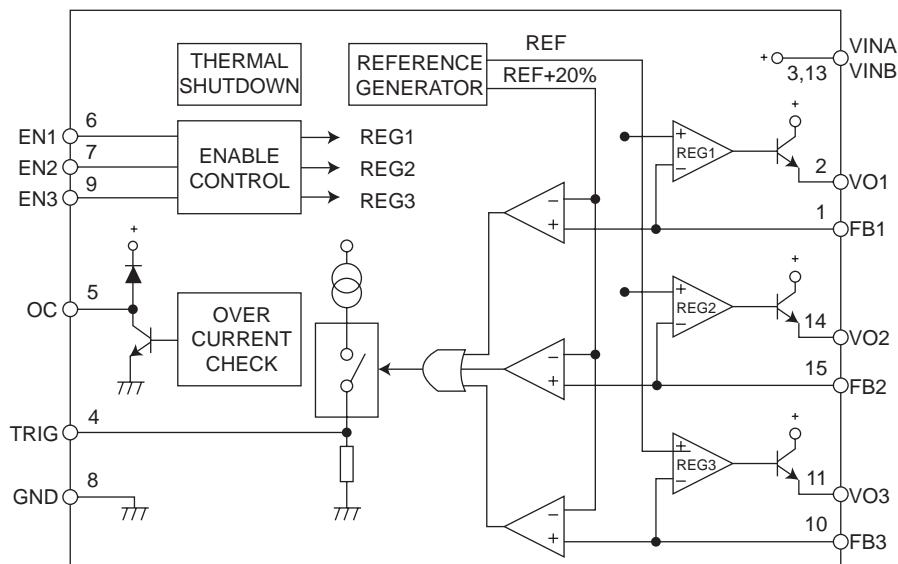


4.5 L4909 (IC910) : Regulator

- Pin layout



- Block diagram

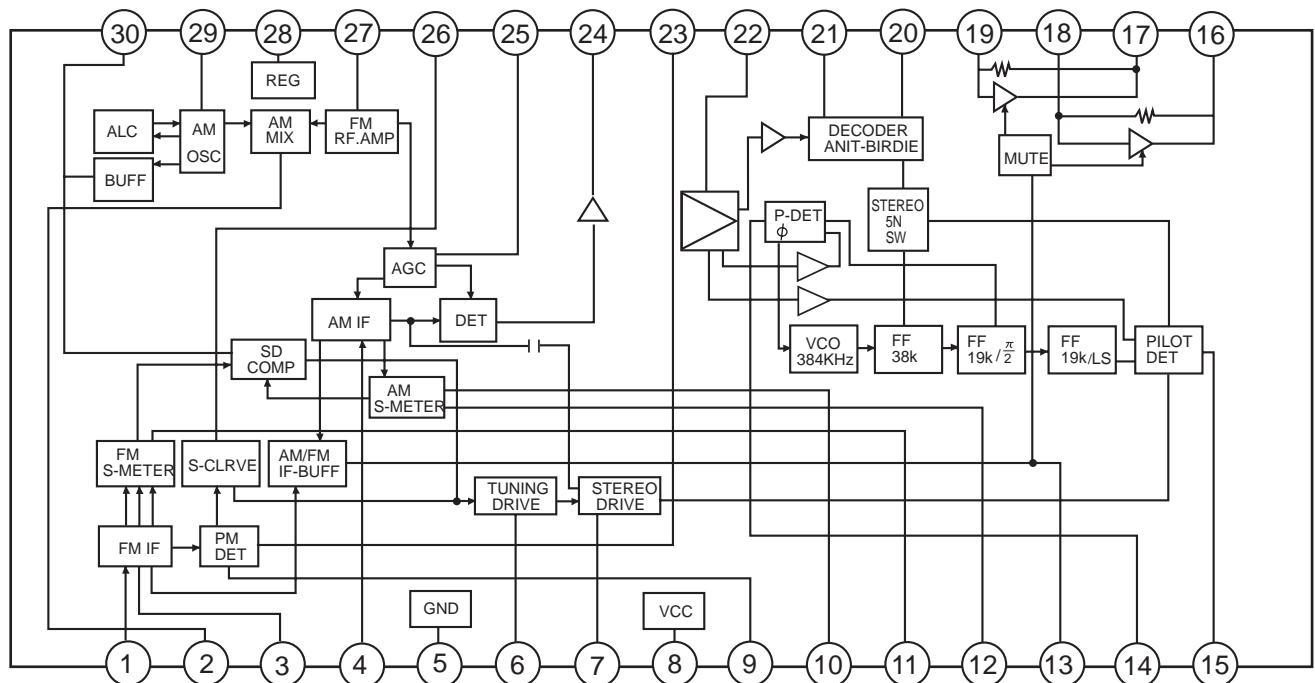


- Pin functions

Pin No.	Symbol	Function
1	FB1	REG1 feedback voltage input
2	VO1	REG1 output voltage
3	VINA	Input DC supply voltage
4	TRIG	Trigger for external SCR (crowbar protection)
5	OC	Over current warning output
6	EN1	REG1 enable input
7	EN2	REG2 enable input
8	GND	Analog ground
9	EN3	REG3 enable input
10	FB3	REG3 feedback voltage input
11	VO3	REG3 output voltage
12	N.C.	Not connected
13	VINB	Input DC supply voltage
14	VO2	REG2 output voltage
15	FB2	REG2 feedback voltage input

4.6 LA1838 (IC1) : FM AM IF amp & detector, FM MPX decoder

- Block Diagram

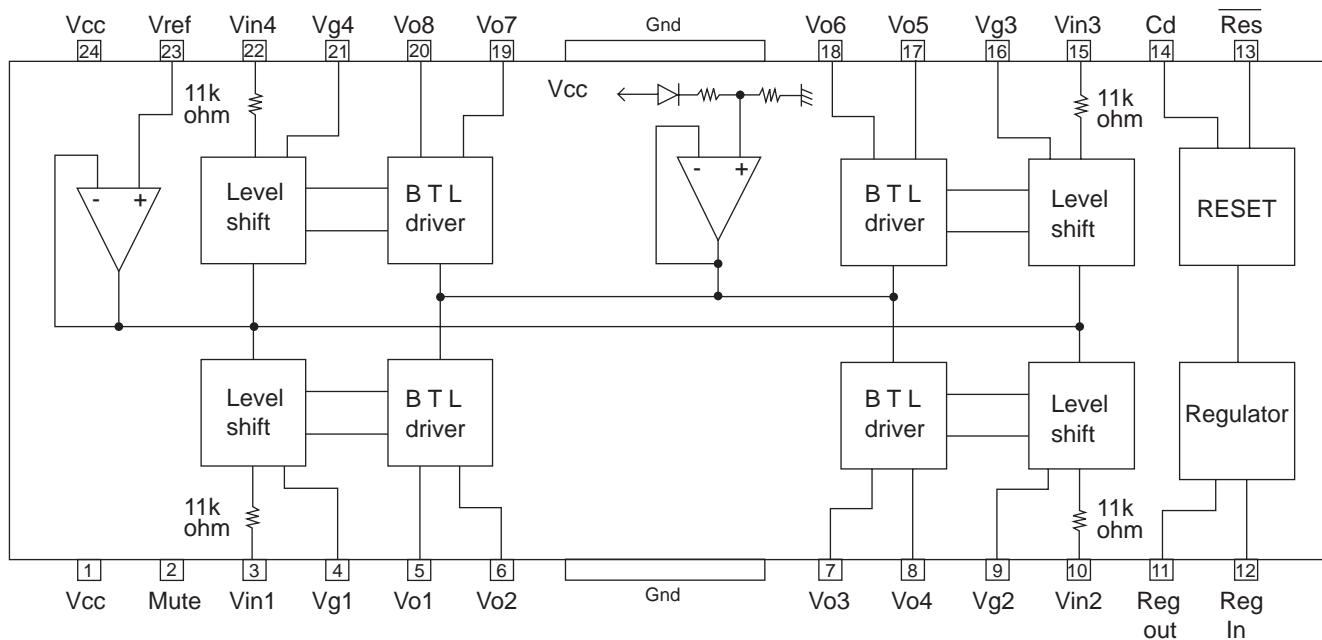


- Pin Function

Pin No.	Symbol	I/O	Function
1	FM IN	I	This is an input terminal of FM IF signal.
2	AM MIX	O	This is an out put terminal for AM mixer.
3	FM IF	I	Bypass of FM IF
4	AM IF	I	Input of AM IF Signal.
5	GND	-	This is the device ground terminal.
6	TUNED	O	When the set is tuning, this terminal becomes "L".
7	STEREO	O	Stereo indicator output. Stereo "L", Mono: "H"
8	VCC	-	This is the power supply terminal.
9	FM DET	-	FM detect transformer.
10	AM SD	-	This is a terminal of AM ceramic filter.
11	FM VSM	O	Adjust FM SD sensitivity.
12	AM VSM	O	Adjust AM SD sensitivity.
13	MUTE	I/O	When the signal of IF REQ of IC121(LC72131) appear, the signal of FM/AM IF output. //Muting control input.
14	FM/AM	I	Change over the FM/AM input. "H" :FM, "L" : AM
15	MONO/ST	O	Stereo : "H", Mono: "L"
16	L OUT	O	Left channel signal output.
17	R OUT	O	Right channel signal output.
18	L IN	I	Input terminal of the Left channel post AMP.
19	R IN	I	Input terminal of the Right channel post AMP.
20	RO	O	Mpx Right channel signal output.
21	LO	O	Mpx Left channel signal output.
22	MPX IN	I	Mpx input terminal
23	FM OUT	O	FM detection output.
24	AM DET	O	AM detection output.
25	AM AGC	I	This is an AGC voltage input terminal for AM
26	AFC	-	This is an output terminal of voltage for FM-AFC.
27	AM RF	I	AM RF signal input.
28	REG	O	Register value between pin 26 and pin28 besides the frequency width of the input signal.
29	AM OSC	-	This is a terminal of AM Local oscillation circuit.
30	OSC BUFFER	O	AM Local oscillation Signal output.

4.7 LA6541-X (IC801) : BTL driver

- Pin layout & Block diagram



- Pin function

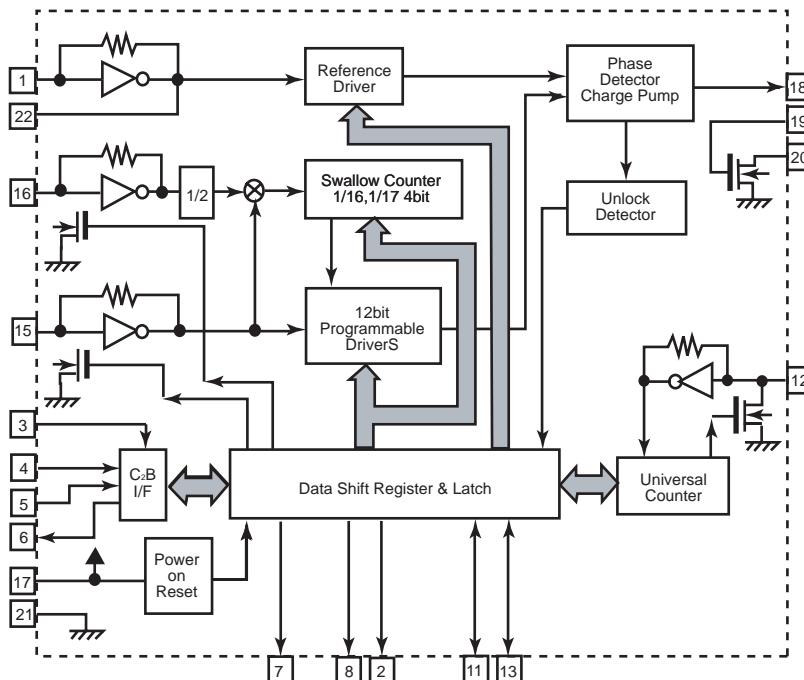
Pin No.	Symbol	Description
1	Vcc	Power supply (Shorted to pin 24)
2	Mute	All BTL amplifier outputs ON/OFF
3	Vin1	BTL AMP 1 input pin
4	Vg1	BTL AMP 1 input pin (For gain adjustment)
5	Vo1	BTL AMP 1 input pin (Non inverting side)
6	Vo2	BTL AMP 1 input pin (Inverting side)
7	Vo3	BTL AMP 2 input pin (Inverting side)
8	Vo4	BTL AMP 2 input pin (Non inverting side)
9	Vg2	BTL AMP 2 input pin (For gain adjustment)
10	Vin2	BTL AMP 2 input pin
11	Reg Out	External transistor collector (PNP) connection. 5V power supply output
12	Reg In	External transistor (PNP) base connection
13	Res	Reset output
14	Cd	Reset output delay time setting (Capacitor connected externally)
15	Vin3	BTL AMP 3 input pin
16	Vg3	BTL AMP 3 input pin (For gain adjustment)
17	Vo5	BTL AMP 3 output pin (Non inverting side)
18	Vo6	BTL AMP 3 output pin (Inverting side)
19	Vo7	BTL AMP 4 output pin (Inverting side)
20	Vo8	BTL AMP 4 output pin (Non inverting side)
21	Vg4	BTL AMP 4 output pin (For gain adjustment)
22	Vin4	BTL AMP 4 output pin
23	Vref	Level shift circuit's reference voltage application
24	Vcc	Power supply (Shorted to pin 1)

4.8 LC72136N (IC2) : PLL frequency synthesizer

- Pin layout

XT	22	XT
FM/AM	2	GND
CE	3	LPFOUT
DI	4	LPFIN
CLOCK	5	PD
DO	6	VCC
FM/ST/VCO	7	FMIN
AM/FM	8	AMIN
	9	
	10	
SDIN	11	IFCONT
	12	IFIN

- Block diagram



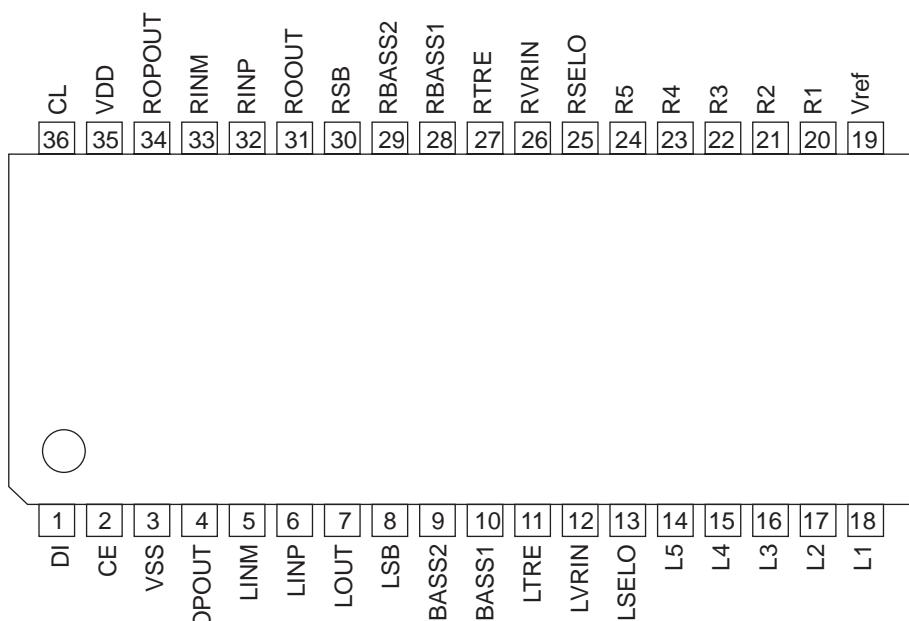
- Pin function

Pin No.	Symbol	I/O	Function
1	XT	I	X'tal oscillator connect (75kHz)
2	FM/AM	O	LOW:FM mode
3	CE	I	When data output/input for 4pin(input) and 6pin(output): H
4	DI	I	Input for receive the serial data from controller
5	CLOCK	I	Sync signal input use
6	DO	O	Data output for Controller Output port
7	FM/ST/VCO	O	Low: MW mode
8	AM/FM	O	Open state after the power on reset
9	LW	I/O	Input/output port
10	MW	I/O	Input/output port
11	SDIN	I/O	Data input/output
12	IFIN	I	IF counter signal input

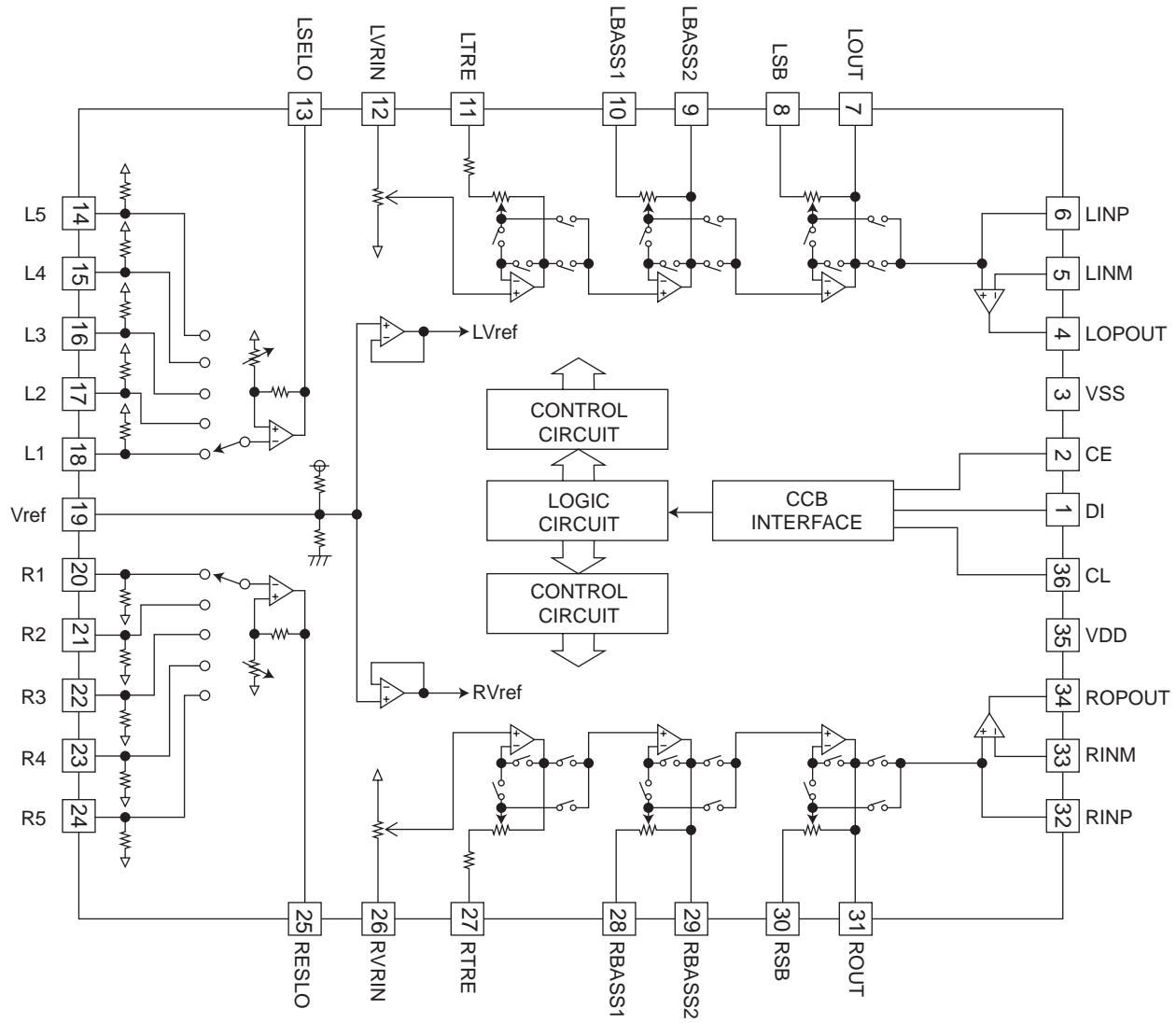
Pin No.	Symbol	I/O	Function
13	IFCONT	O	IF signal output
14		-	Not use
15	AMIN	I	AM Local OSC signal output
16	FMIN	I	FM Local OSC signal input
17	VCC	-	Power supply(VDD=4.5-5.5V) When power ON:Reset circuit move
18	PD	O	PLL charge pump output (H: Local OSC frequency Height than Reference frequency.L: Low Agreement: Height impedance)
19	LPFIN	I	Input for active lowpassfilter of PLL
20	LPFOUT	O	Output for active lowpassfilter of PLL
21	GND	-	Connected to GND
22	XT	I	X'tal oscillator(75KHz)

4.9 LC75345M-X (IC901) : E.volume

- Pin layout



- Block diagram

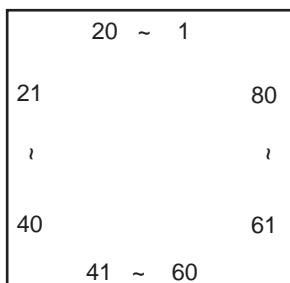


- Pin function

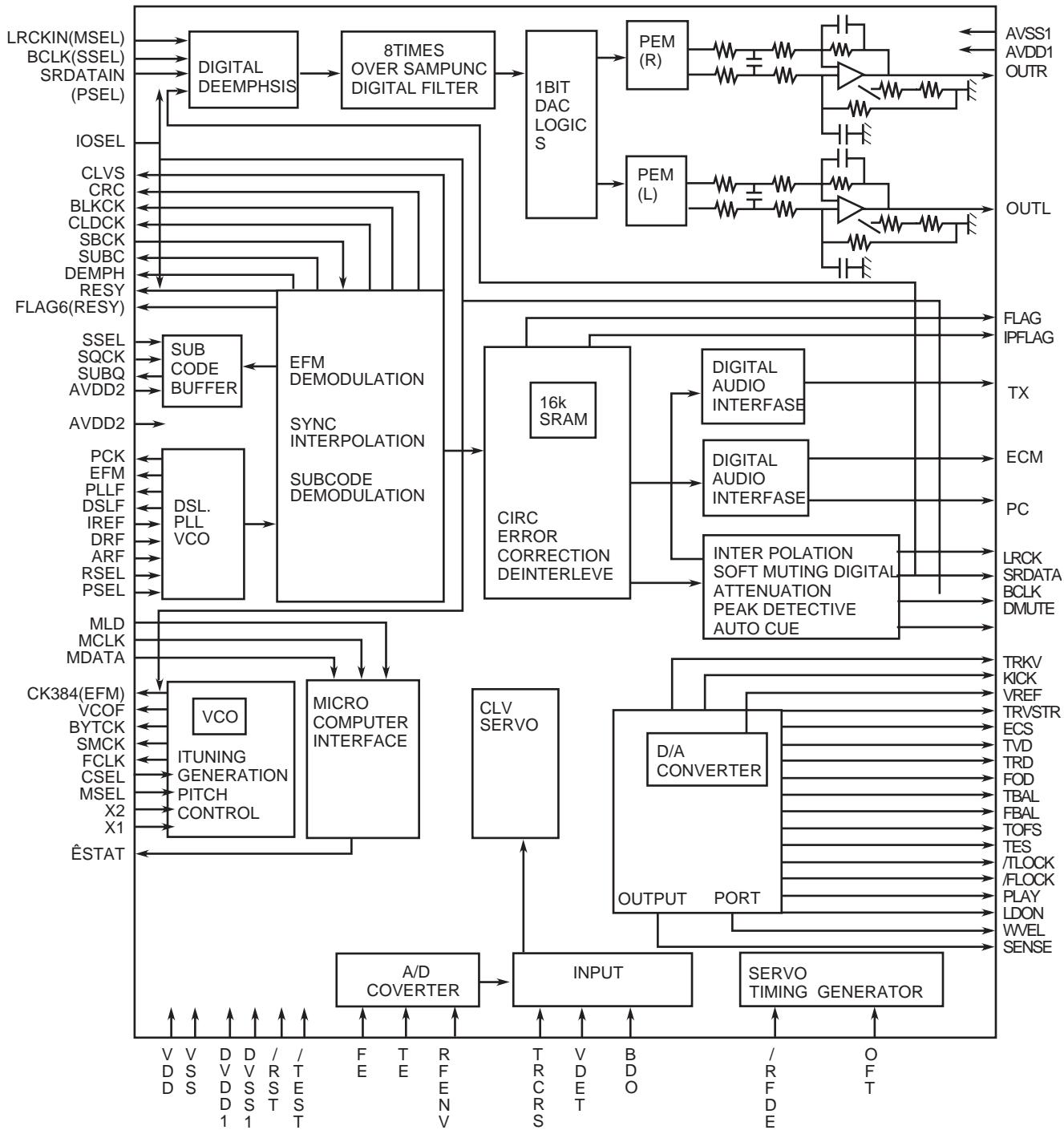
Pin No.	Symbol	Function
1	DI	Serial data and clock input pin for control.
2	CE	Chip enable pin.
3	VSS	Ground pin.
4	LOPOUT	Output pin of general-purpose operation amplifier.
5	LINM	Non-inverted input pin of general-purpose operation amplifier.
6	LINP	Non-inverted input pin of general-purpose operation amplifier.
7	LOUT	ATT + equalizer output pin.
8	LSB	Capacitor and resistor connection pin comprising filters for bass and super-bass band.
9	LBASS2	Capacitor and resistor connection pin comprising filters for bass and super-bass band.
10	LBASS1	Capacitor and resistor connection pin comprising filters for bass and super-bass band.
11	LTRE	Capacitor and resistor connection pin comprising treble band filter.
12	LVRIN	Volume input pin.
13	LSELO	Input selector output pin.
14	L5	Input signal pin.
15	L4	Input signal pin.
16	L3	Input signal pin.
17	L2	Input signal pin.
18	L1	Input signal pin.
19	Vref	0.5 x VDD voltage generation block for analog ground.
20	R1	Input signal pin.
21	R2	Input signal pin.
22	R3	Input signal pin.
23	R4	Input signal pin.
24	R5	Input signal pin.
25	RSELO	Input selector output pin.
26	RVRIN	Volume input pin.
27	RTRE	Capacitor connection pin comprising treble band filter.
28	RBASS1	Capacitor and resistor connection pin comprising filter for bass and super-bass band.
29	RBASS2	Capacitor and resistor connection pin comprising filter for bass and super-bass band.
30	RSB	Capacitor and resistor connection pin comprising filter for bass and super-bass band.
31	ROUT	ATT + equalizer output pin.
32	RINP	Non inverted input pin of general-purpose operation amplifier.
33	RINM	Non inverted input pin of general purpose operation amplifier.
34	ROPOUT	Output pin of general-purpose operation amplifier.
35	VDD	Supply pin.
36	CL	Serial data and clock input pin for control.

4.10 MN662748RPMFA (IC651) : Digital servo & Digital signal processor

- Pin layout



- Block diagram



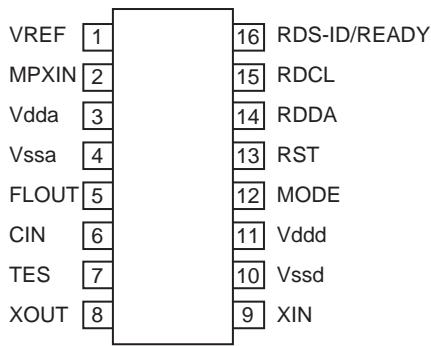
- Pin function

Pin No.	Symbol	I/O	Function
1	BCLK	O	Not used
2	LRCK	O	Not used
3	SRDATA	O	Not used
4	DVDD1	-	Power supply (Digital)
5	DVSS1	-	Connected to GND
6	TX	O	Digital audio interface output
7	MCLK	I	CPU command clock signal input (Data is latched at signal's rising point)
8	MDATA	I	CPU command data input
9	MLD	I	CPU command load signal input
10	SENSE	O	Sense signal output
11	FLOCK	O	Focus lock signal output Active :Low
12	TLOCK	O	Tracking lock signal output Active :Low
13	BLKCK	O	sub-code/block/clock signal output
14	SQCK	I	Outside clock for sub-code Q register input
15	SUBQ	O	Sub-code Q -code output
16	DMUTE		Connected to GND
17	STATUS	O	"Status signal (CRC,CUE,CLVS,TTSTOP,ECLV,EC LV,SQOK)"
18	RST	I	Reset signal input (L:Reset)
19	SMCK	-	Not used
20	PMCK	-	Not used
21	TRV	O	Traverse enforced output
22	TVD	O	Traverse drive output
23	PC	-	Not used
24	ECM	O	Spindle motor drive signal (Enforced mode output) 3-State
25	ECS	O	"Spindle motor drive signal (Servo error signal output)"
26	KICK	O	Kick pulse output
27	TRD	O	Tracking drive output
28	FOD	O	Focus drive output
29	VREF	I	"Reference voltage input pin for D/A output block (TVD,FOD,FBA,TBAL)"
30	FBAL	O	Focus Balance adjust signal output
31	TBAL	O	Tracking Balance adjust signal output
32	FE	I	Focus error signal input (Analog input)
33	TE	I	Tracking error signal input (Analog input)
34	RF ENV	I	RF envelope signal input (Analog input)
35	VDET	I	Vibration detect signal input (H:detec)
36	OFT	I	Off track signal input (H:off track)
37	TRCRS	I	Track cross signal input

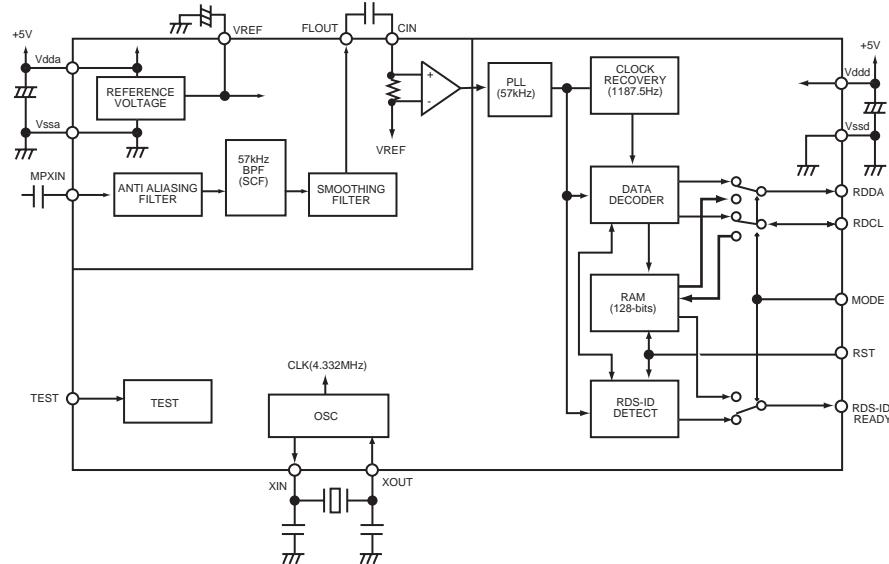
Pin No.	Symbol	I/O	Function
38	RFDET	I	RF detect signal input (L:detect)
39	BDO	I	BDO input pin (L:detect)
40	LDON	I	Laser ON signal output (H:on)
42	TES	O	Tracking error shunt signal output (H:shunt)
41	PLAY	-	Not used
43	WVEL	-	Not used
44	ARF	I	RF signal input
45	IREF	I	Reference current input pin
46	DRF	I	Bias pin for DSL
47	DSL	I/O	Loop filter pin for DSL
48	PLLF	I/O	Loop filter pin for PLL
49	VCOF	-	Not used
50	AVDD2	-	Power supply (Analog)
51	AVSS2	-	Connected to GND (Analog)
52	EFM	-	Not used
53	PCK	-	Not used
54	PDO	-	Not used
55	SUBC	-	Not used
56	SBCK	-	Not used
57	VSS	-	"Connected to GND (for X'tal oscillation circuit)"
58	XI	I	Input of 16.9344MHz X'tal oscillation circuit
59	X2	O	Output of X'tal oscillation circuit
60	VDD	-	Power supply (for X'tal oscillation circuit)
61	BYTCK	-	Not used
62	CLDCK	-	Not used
63	FLAG	-	Not used
64	IPPLAG	-	Not used
65	FLAG	-	Not used
66	CLVS	-	Not used
67	CRC	-	Not used
68	DEMPH	-	Not used
69	RESY	-	Not used
70	IOSEL	-	pull up
71	TEST	-	pull up
72	AVDD1	-	Power supply (Digital)
73	OUT L	O	Lch audio output
74	AVSS1	-	Connected to GND
75	OUT R	O	Rch audio output
76	RSEL	-	pull up
77	CSEL	-	Connected to GND
78	PSEL	-	Connected to GND
79	MSEL	-	Connected to GND
80	SSEL	-	Pull up

4.11 LA72723(IC3): RDS demodulation

- Pin layout



- Block Diagram

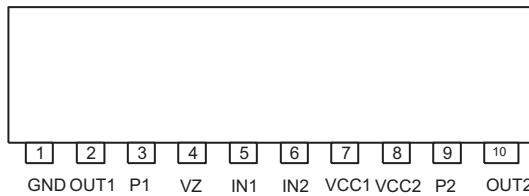


- Pin functions

Pin No.	Symbol	I/O	Function
1	VREF	O	Reference voltage output (Vdda/2)
2	MPXIN	I	Baseband (multiplexed) signal input
3	Vdda	-	Analog power supply (+5V)
4	Vssa	-	Analog ground
5	FLOUT	O	Subcarrier input (filter output)
6	CIN	I	Subcarrier input (comparator input)
7	TEST	I	Test input
8	XOUT	O	Crystal oscillator output (4.332MHz)
9	XIN	I	Crystal oscillator input (external reference input)
10	Vssd	-	Digital ground
11	Vddd	-	Digital power supply
12	MODE	I	Read mode setting (0:master, 1:slave)
13	RST	I	RDS-ID/RAM reset (positive polarity)
14	RDDA	O	RDS data output
15	RDCL	I/O	RDS clock output (master mode)/RDS clock input (slave mode)
16	RDS-ID/READY	O	RDS-ID/READY output (negative polarity)

4.12 LB1641 (IC801) : DC motor driver

- Pin layout

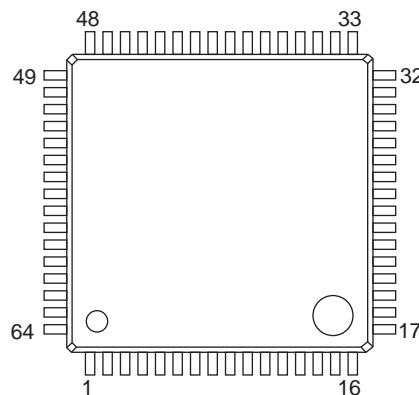


- Truth table

Input		Output		Mode
IN1	IN2	OUT1	OUT2	
0	0	0	0	Brake
1	0	1	0	CLOCKWISE
0	1	0	1	COUNTER-CLOCKWISE
1	1	0	0	Brake

4.13 NJU6433FG1 (IC934) : LCD driver

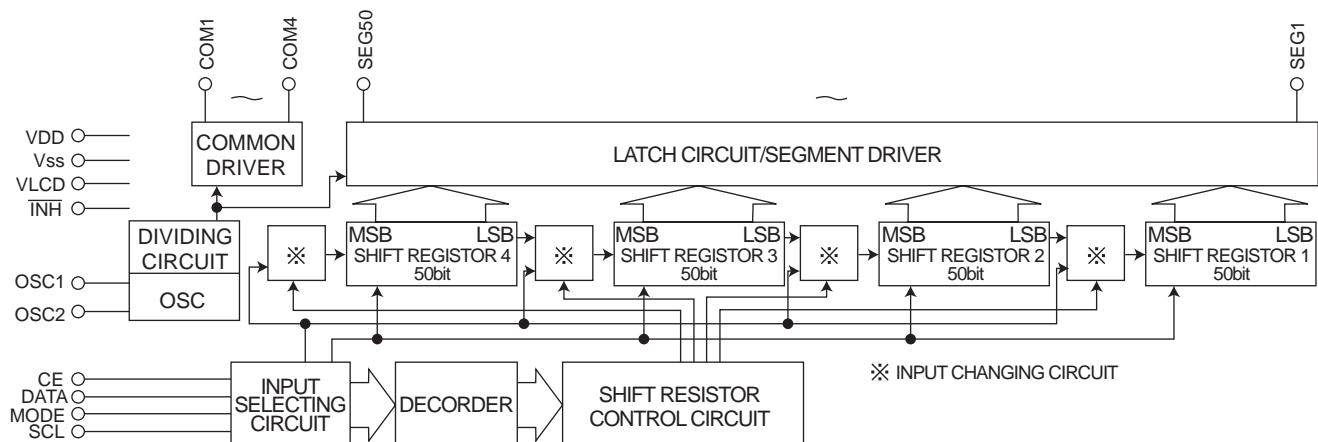
- Pin layout



- Pin function

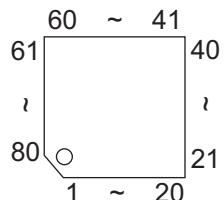
Pin No.	Symol	Function
1~50	SEG1~SEG50	Segment output terminal for LCD.
51,52	OSC1,OSC2	CR oscillating terminal.
53	VDD	Power supply terminal for inside.
54	Vss	GND level.
55	VLCD	Power supply terminal for LCD drive.
56	CE	Chip enable.
57	SCL	Serial data transmission clock terminal.
58	DATA	Serial data input terminal.
59	MODE	Mode-setting-signal input terminal.
60	INH	Display-off control signal input terminal.
61~44	COM4~COM1	Common output terminal for LCD.

- Block diagram



4.14 UPD780055GC-045 (IC931) : Micon

- Pin layout



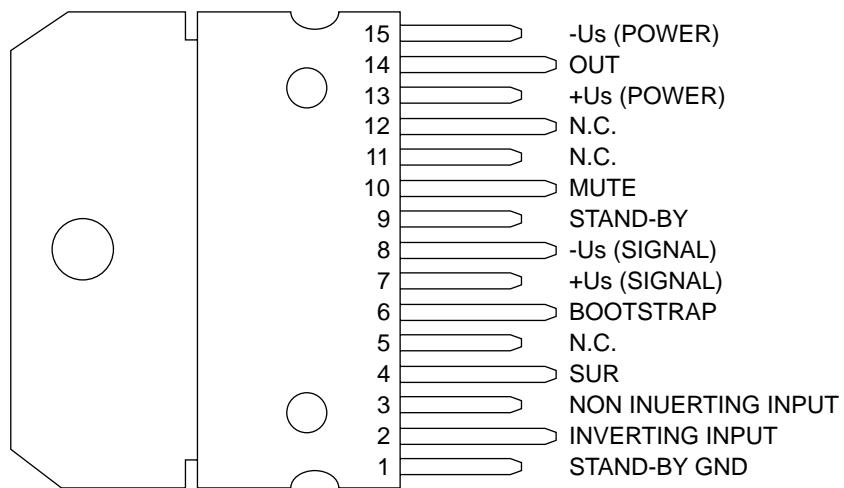
- Pin function

Pin No.	Symbol	I/O	Function
1	SAFETY0	I	Irregular voltage detection 0
2	REST/OP_SW/CL_SW	I	REST/CLOSE switch detect port
3	SCD	I	CD safety voltage detect port
4	AVSS	-	GND
5	NC	-	Not use
6	NC	-	Not use
7	AVREF1	-	Reference voltage
8	SUBQ/RDDA	I	Q-code data input port
9	NC	-	Not use
10	SQCK	O	Q-code serial clock
11	STAT	I	Status input port
12	MDATA	O	Data input port
13	MCLK	O	Data clock
14	RST	O	Reset
15	MLD	O	Command ready signal
16	MUTE	O	Mute control port
17	SDATA/VOLDA	O	Serial data / Volume data
18	SCK/VOLCK	O	Serial clock / Volume clock
19	FLAG	-	Not use
20	CLOSE	I	Door close switch input port
21	OPEN	I	Door open switch input port
22	FCD	O	CD Function ('H'=CD)
23	NC	-	Not use
24	NC	-	Not use
25	VOLCE	O	Volume Chip Enable
26	NC	-	Not use
27	LINEMUTE	O	Line mute
28	PBMUTE	O	Playback mute
29	SMUTE	O	System mute
30	SPKMUTE	O	Speaker mute
31	AHB	O	AHB control
32	POUT	O	Power On/Off ('H'=Power On)
33	VSS	-	GND
34	PROTECTOR	O	Protector
35	MODEL1	I	MODEL setting
36	MODEL2	I	MODEL setting

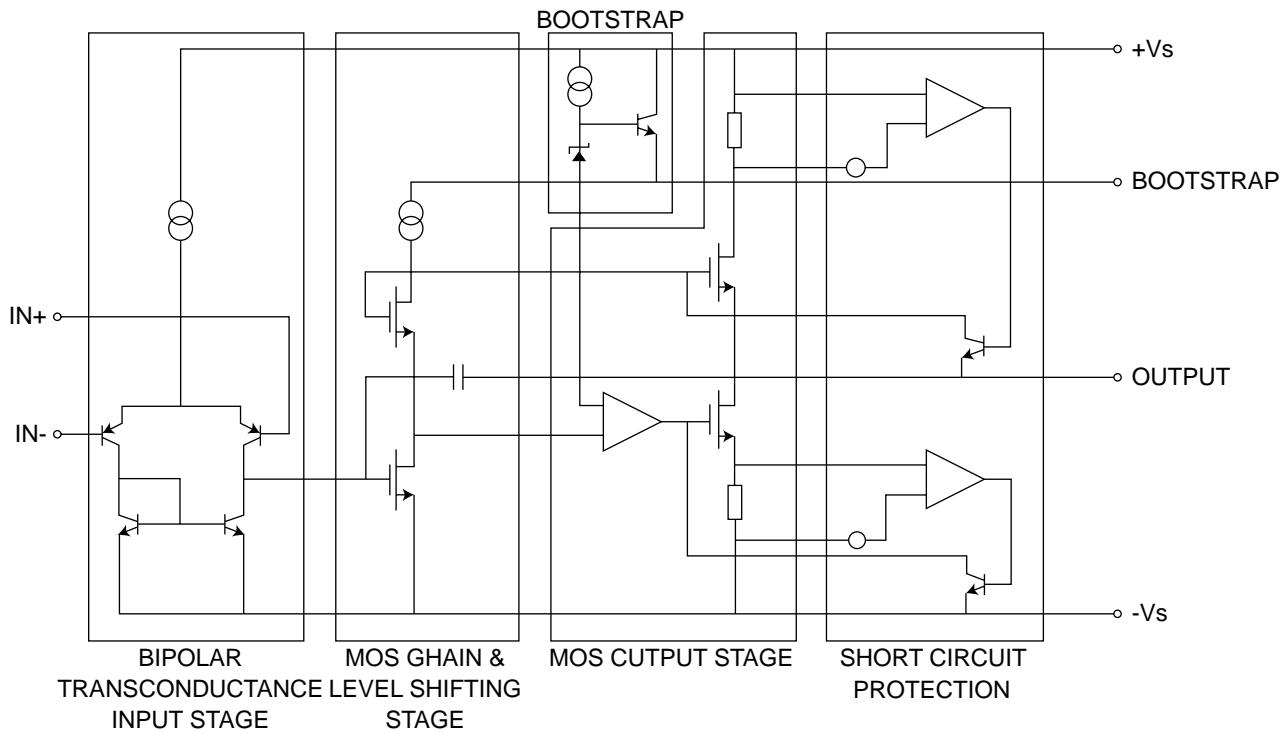
Pin No.	Symbol	I/O	Function
37	NC	-	Not use
38	NC	-	Not use
39	NC	-	Not use
40	LEDRV	O	LED indicate Reverse
41	LEDREC	O	LED indicate REC
42	LEDFR	O	LED indicate Forward
43	STTA	O	Tape strobe
44	DATA	O	LCD data
45	MODE	O	LCD data mode control
46	SCL	O	LCD serial clock
47	NC	-	Not use
48	PHOTO	I	Tape end detection
49	INH	O	LCD driver inhibit ('L' at end of transmission)
50	LCDCE	-	LCD chip enable
51	DIMMER	-	Dimmer control
52	VOL+	I	Volumn plus
53	LEDCTL	O	Power standby LED control
54	BASS-	I	Bass minus
55	VOL-	I	Volumn minus
56	BASS+	I	Bass plus
57	TUST/CE	O	Tuner PLL strobe
58	FTUNER	O	Tuner function ('H'=TUNER)
59	BUP	O	Back up power detect ('H'=BACKUP)
60	RESET	-	Reset signal
61	REM	I	Remote control input
62	RDSCK	I	RDS clock
63	MPX	I	FM stereo detection ('L'=STEREO)
64	NC	-	Not use
65	+BCTL	-	Not use
66	BLKCL	I	Block clock input port
67	VSS0	-	GND
68	VDD	-	Power supply
69	X2	-	Not use
70	X1	-	Not use
71	IC	-	GND
72	XT2	-	Not use
73	XT1	-	Not use
74	AVDD	-	Power supply
75	AVREF0	-	Reference voltage
76	SAFETY1	I	Irregular voltage detection 1
77	TAPE0	I	Tape Switch 0
78	TAPE1	I	Tape Switch 1
79	KEY0	I	Unit Key input 1
80	KEY1	I	Unit Key input 0

4.15 TDA7294 (IC940,IC941) : Audio amp.

- Pin layout



- Block diagram



JVC

VICTOR COMPANY OF JAPAN, LIMITED

AV & MULTIMEDIA COMPANY AUDIO/VIDEO SYSTEMS CATEGORY 10-1,1chome,Ohwatari-machi,Maebashi-city,371-8543,Japan

(No.22036)



Printed in Japan
WPC

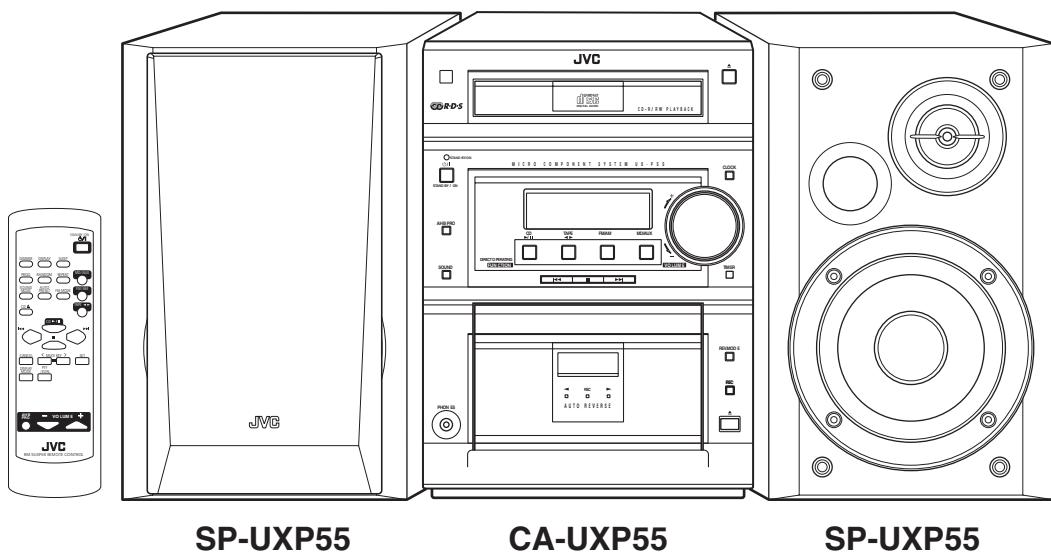
JVC

SCHEMATIC DIAGRAMS

MICRO COMPONENT SYSTEM

UX-P55

CD-ROM No.SML200304



Area Suffix

- B ----- U.K.
E ----- Continental Europe
EN ----- Northern Europe

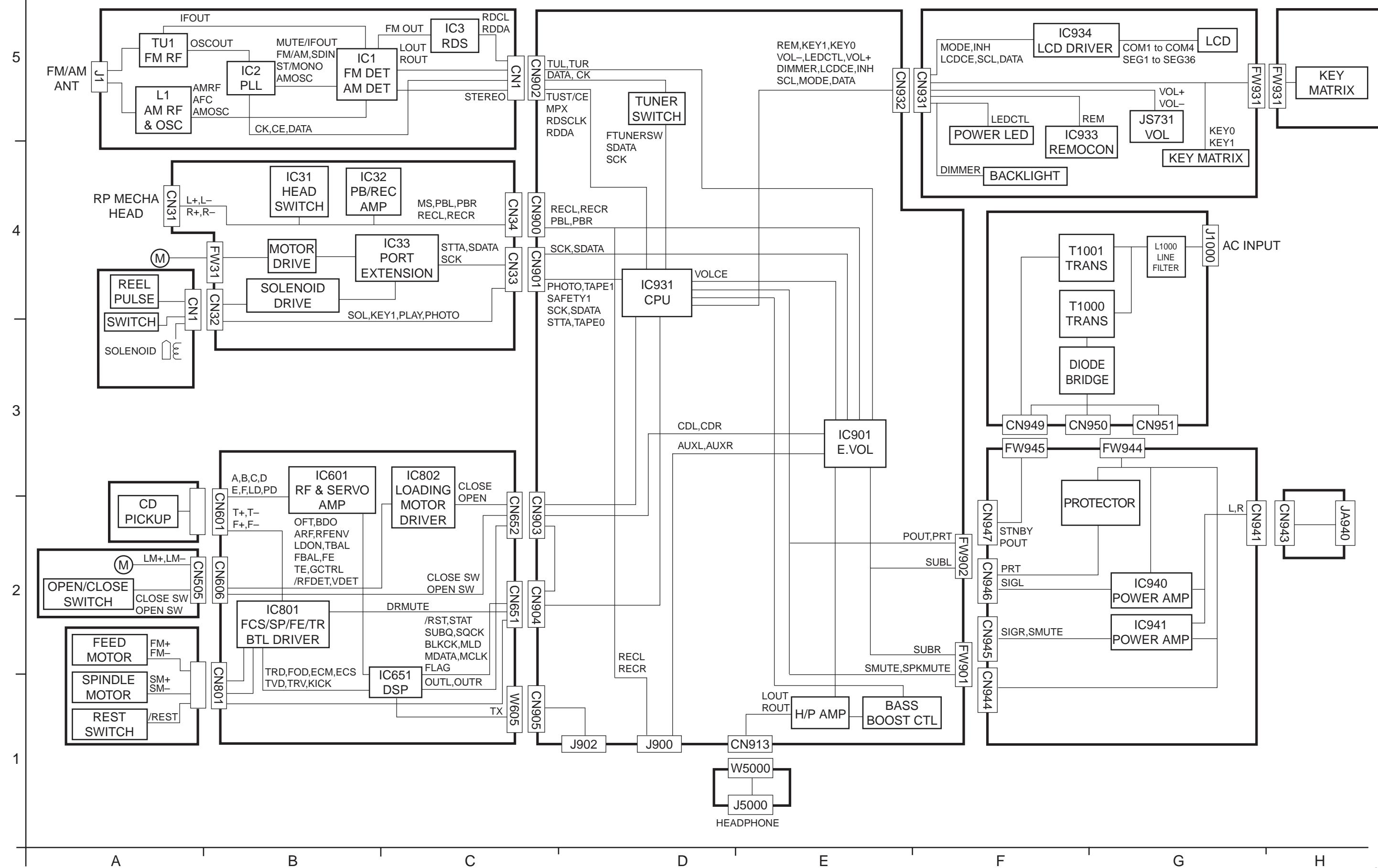
Contents

Block diagram -----	2-1
Standard schematic diagrams -----	2-2
Printed circuit boards -----	2-9 to 11

In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (-■-), diode (■) and ICP (●) or identified by the "Δ" mark nearby are critical for safety.

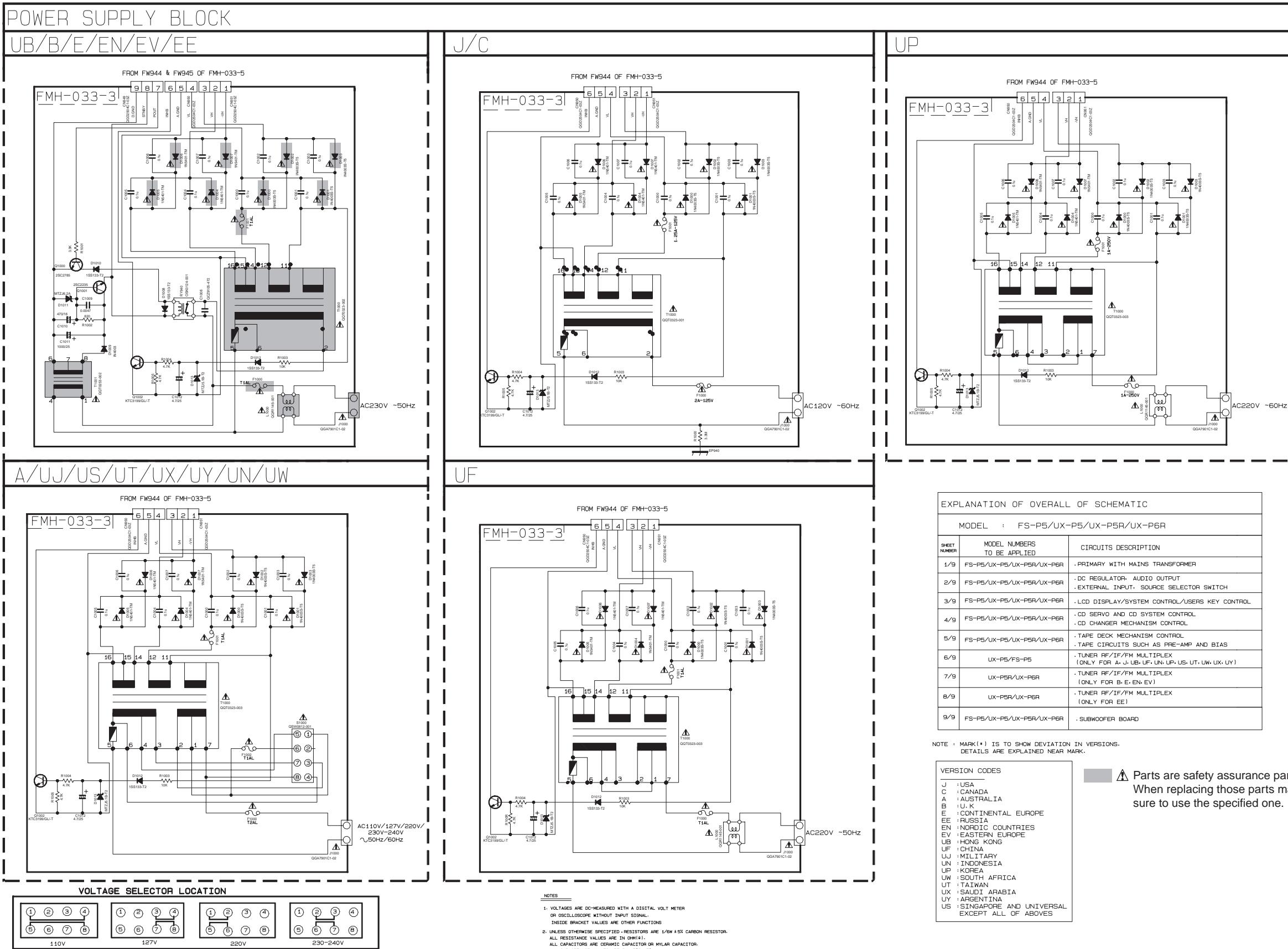
(This regulation does not correspond to J and C version.)

Block diagram

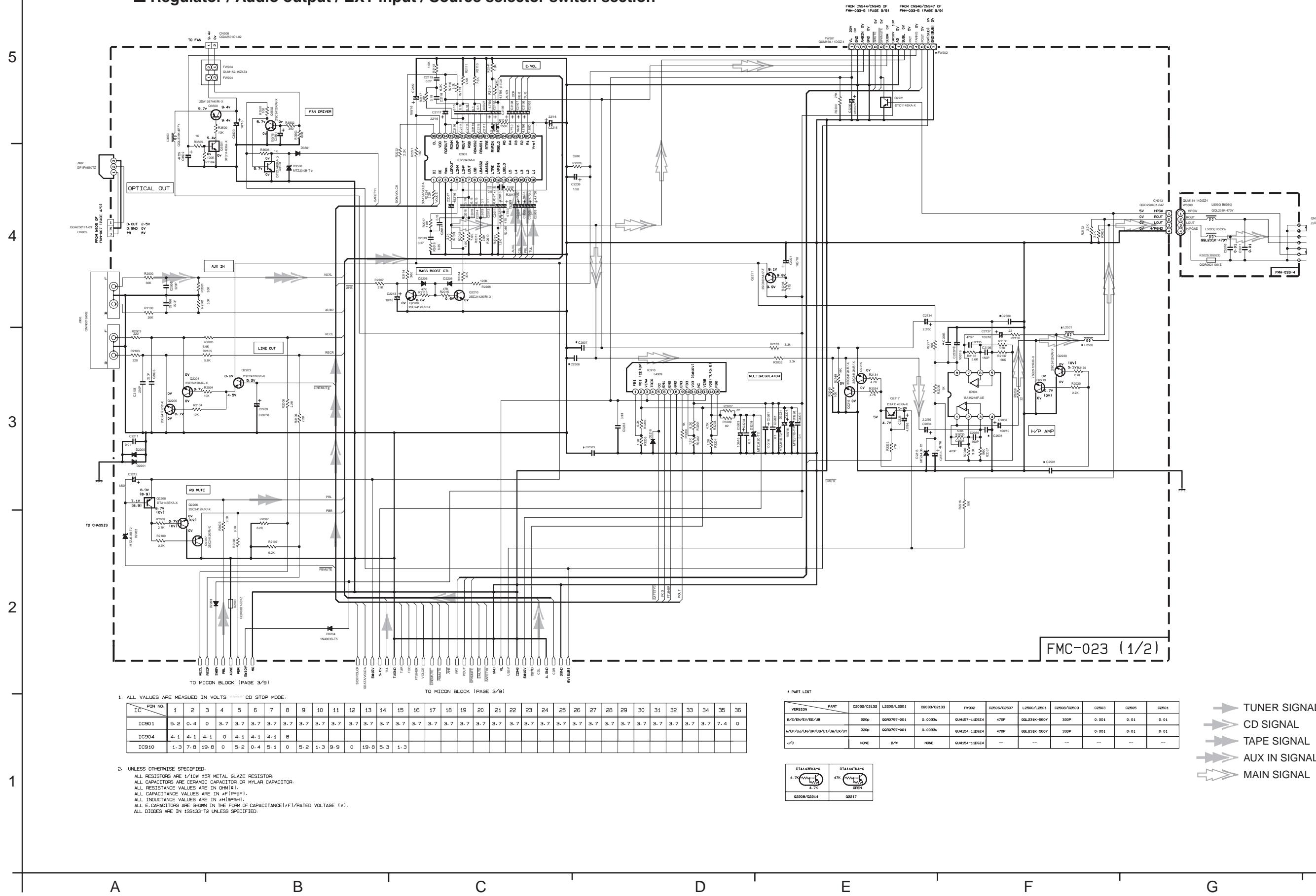


Standard schematic diagrams

■ Primary with Main transformer section



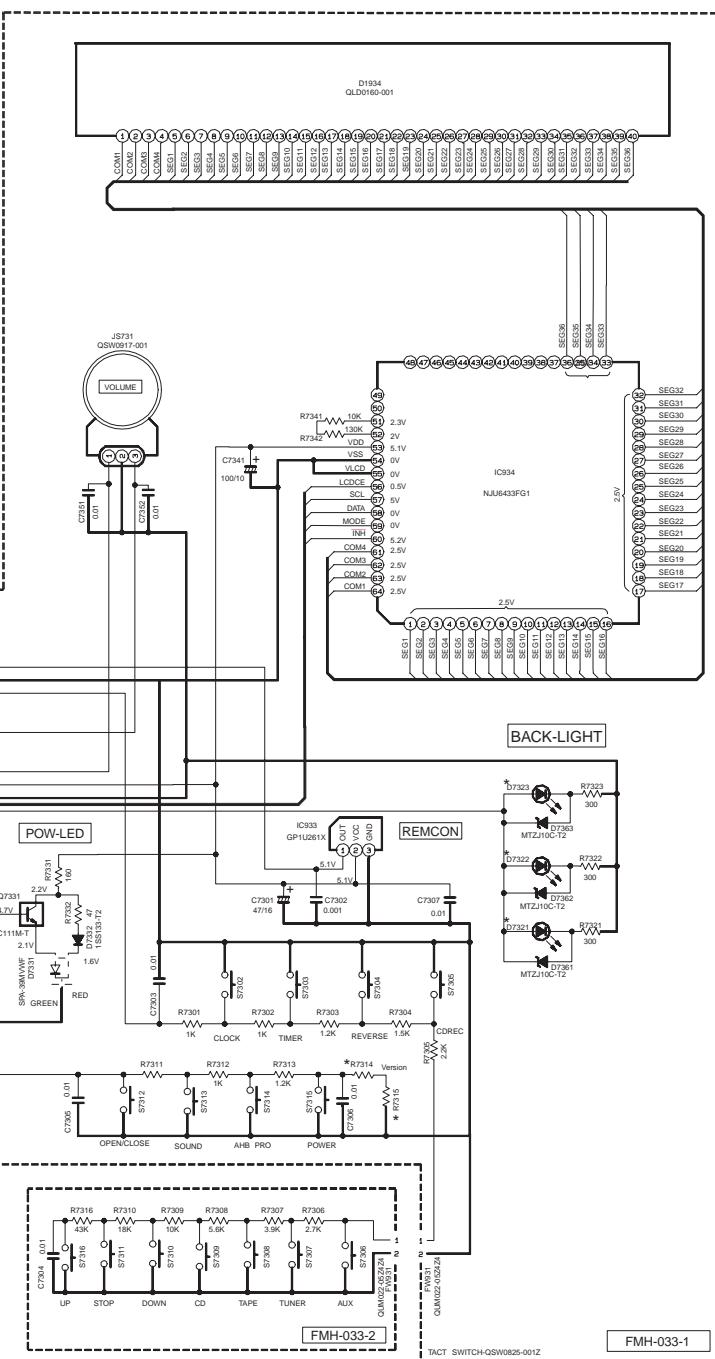
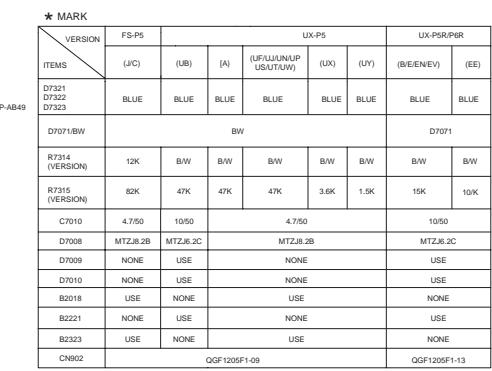
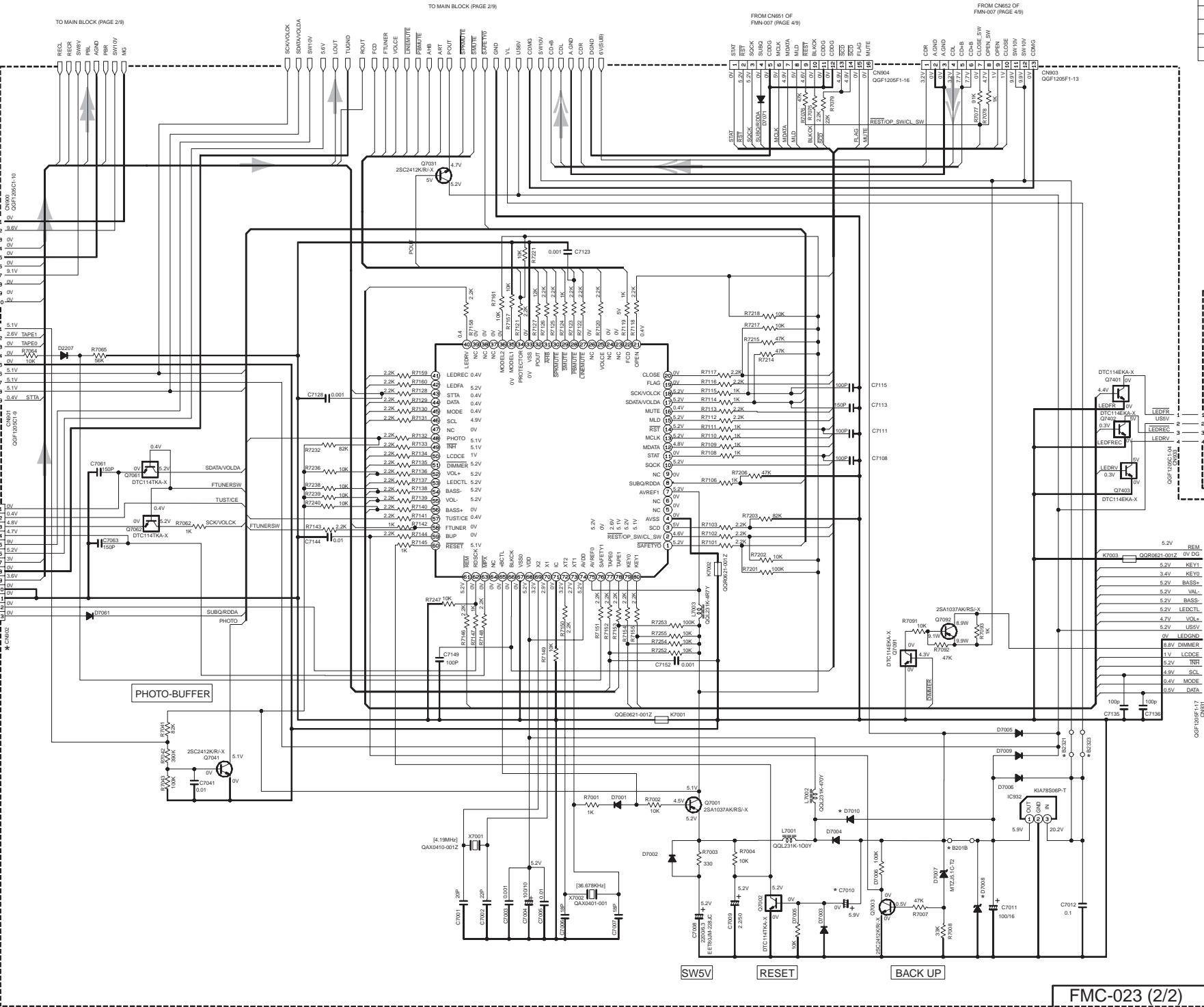
■ Regulator / Audio output / EXT input / Source selector switch section



UX-P55

UX-P55

■ LCD / System / User key control section

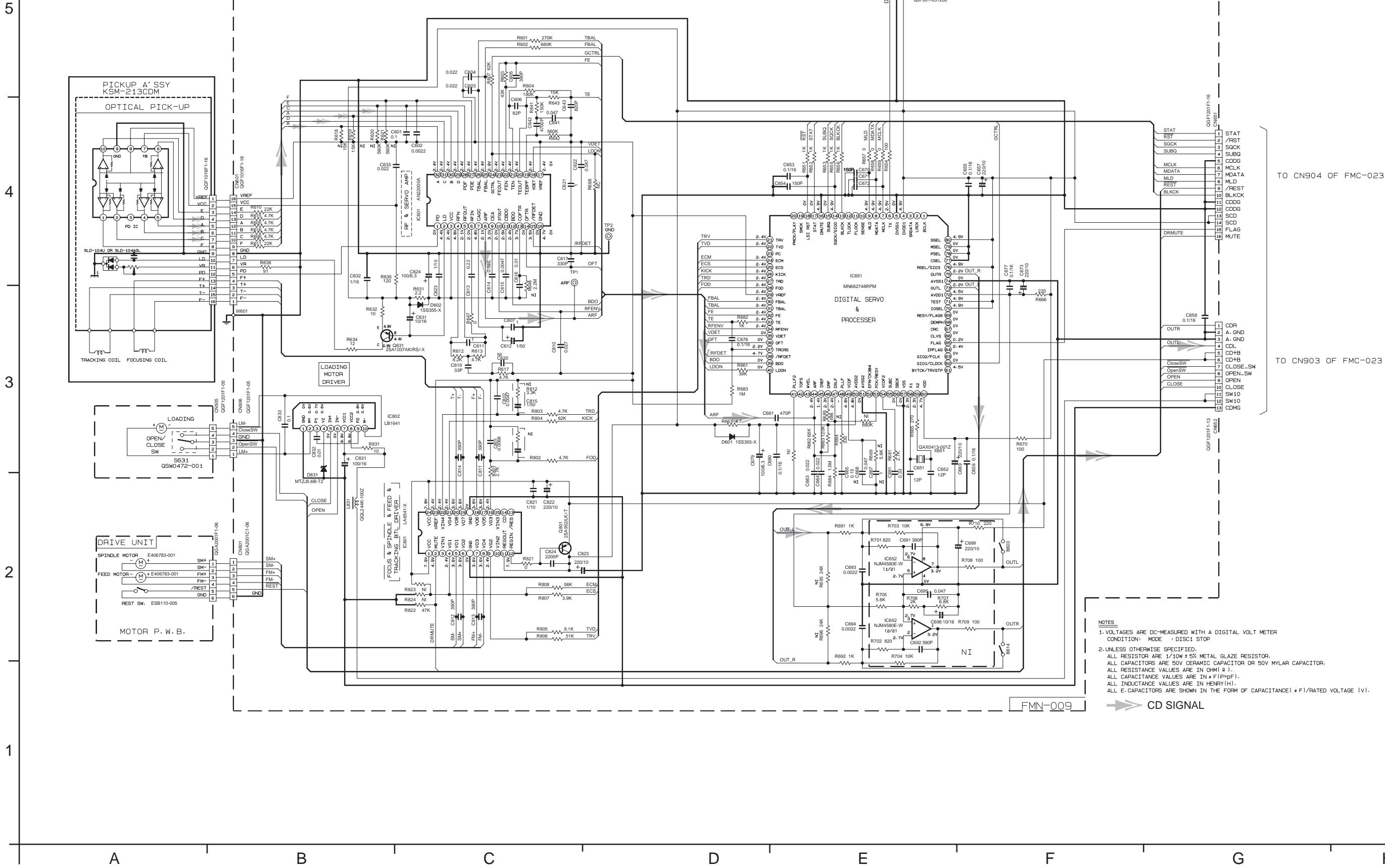


NOTE:

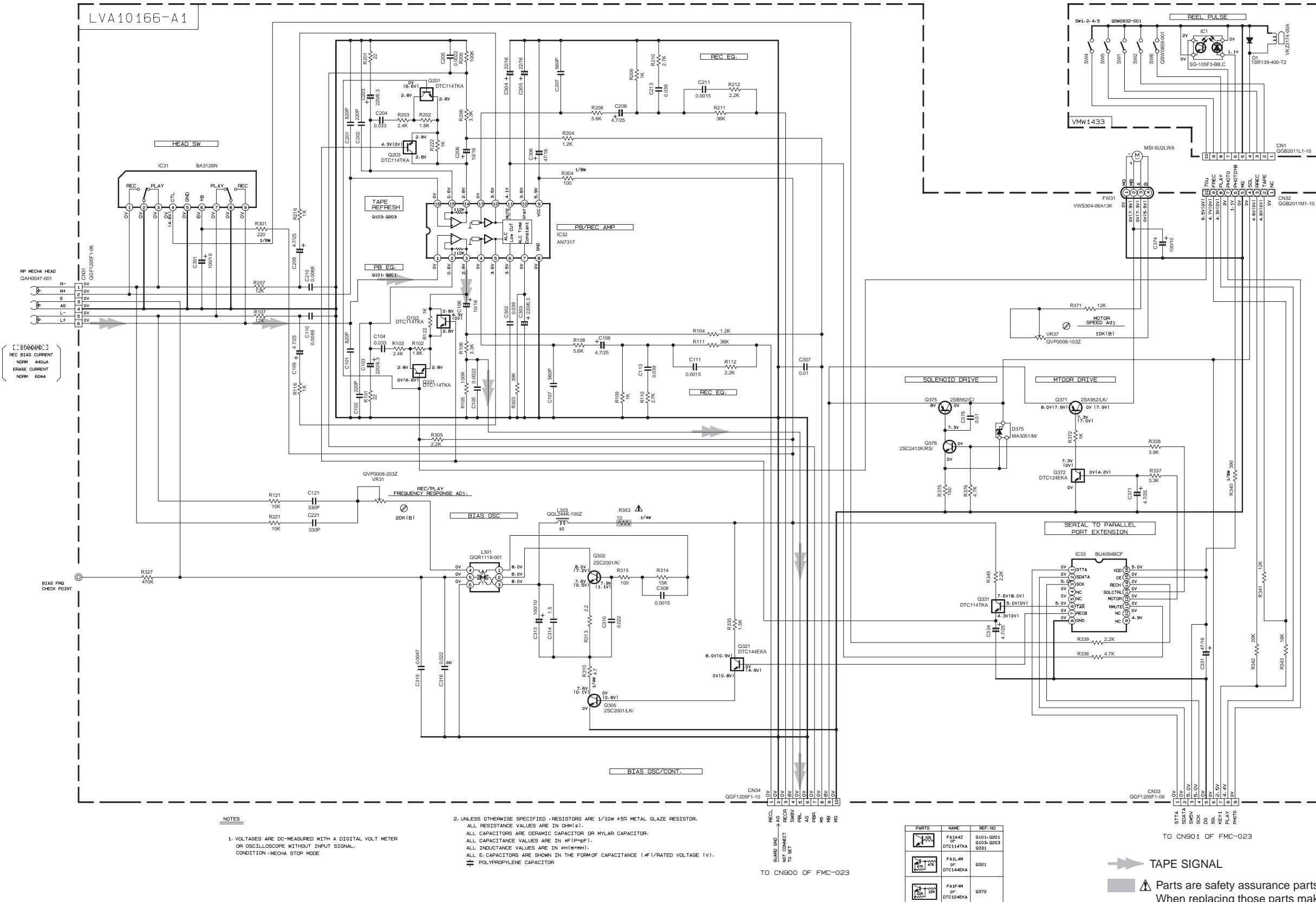
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL
CONDITION --- CD STOP MODE

2. UNLESS OTHERWISE SPECIFIED.
ALL RESISTORS ARE 1/10W ±5% METAL GLAZE RESISTOR.
ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.

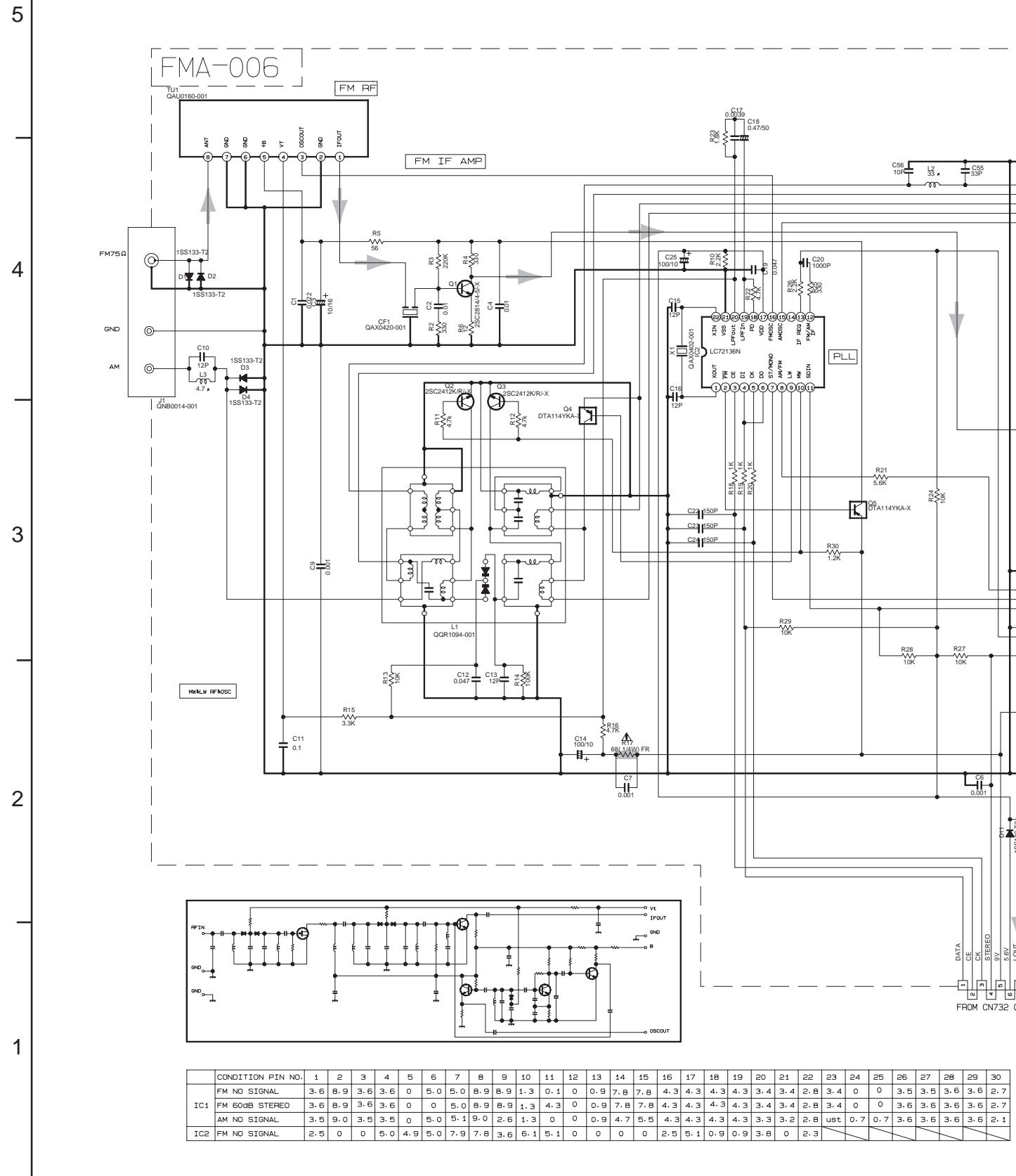
■ CD servo control section



■ Cassette mechanism control section



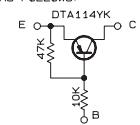
■ Tuner section



NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER.
2. ALL RESISTORS ARE $1/8W \pm 5\%$ METAL GLAZE RESISTOR.
3. ALL RESISTANCE VALUES ARE IN OHM(Ω).
4. ALL CAPACITANCE VALUES ARE IN F ($p=PF$).
5. ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE ($\text{A}F$)/RATED VOLTAGE (V).
6. SI DIODES (■) ARE ALL 1SS133-T THAT CAN BE CHANGED TO SIMILAR DIODE SUCH AS MA165 OR HSS104J.
7. PARTS NO. OF TRANSISTORS ARE AS FOLLOWS.
Q1 2SC2814/4- $/-X$ Q2-Q3 2SC2412K/R- $/-X$
Q4-Q5 DTA114YKA-X

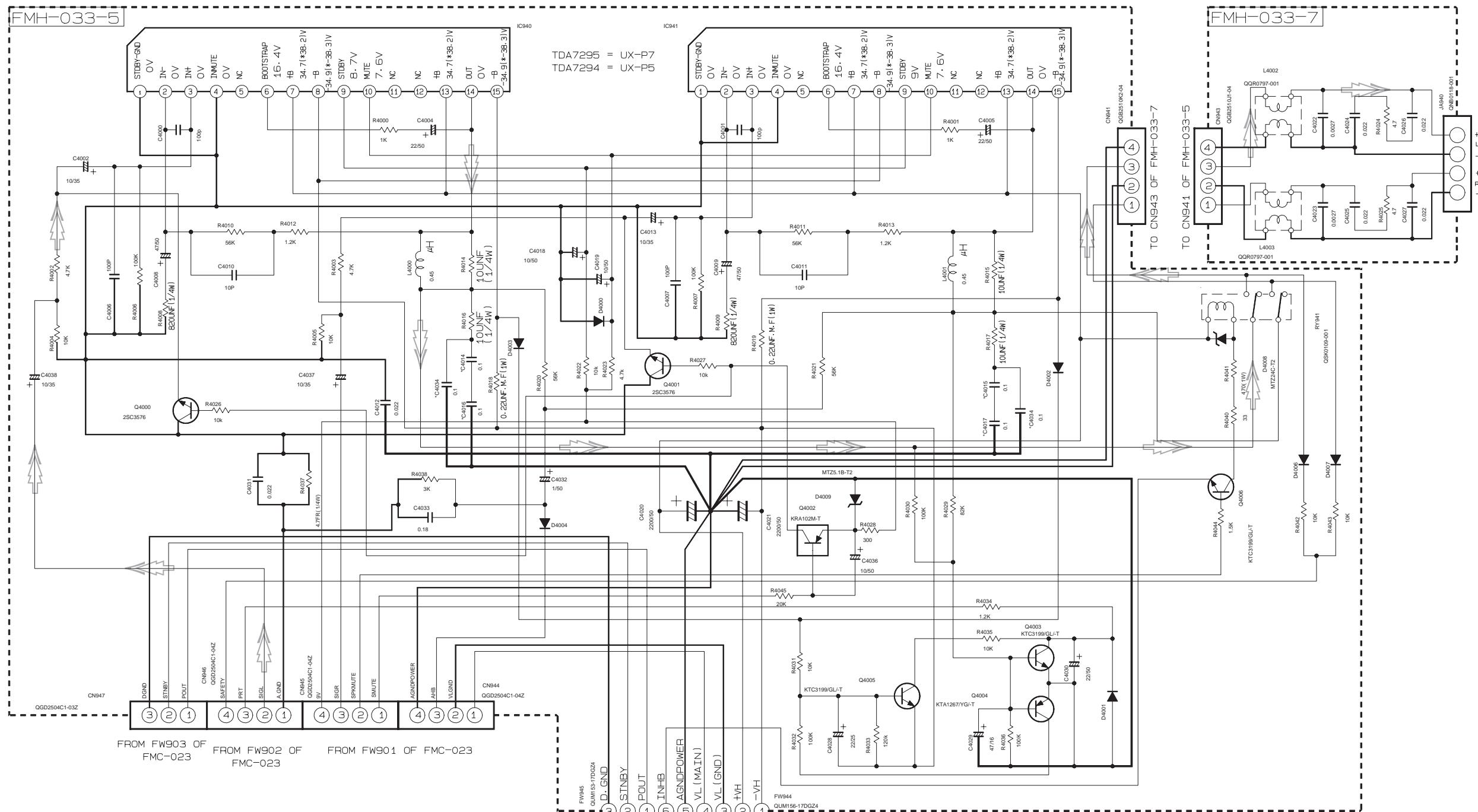
B. INSIDE OF DIGITAL TRANSISTORS ARE SHOWN AS FOLLOWS.



⚠ Parts are safety assurance parts.
When replacing those parts make sure to use the specified one.

➡ TUNER SIGNAL

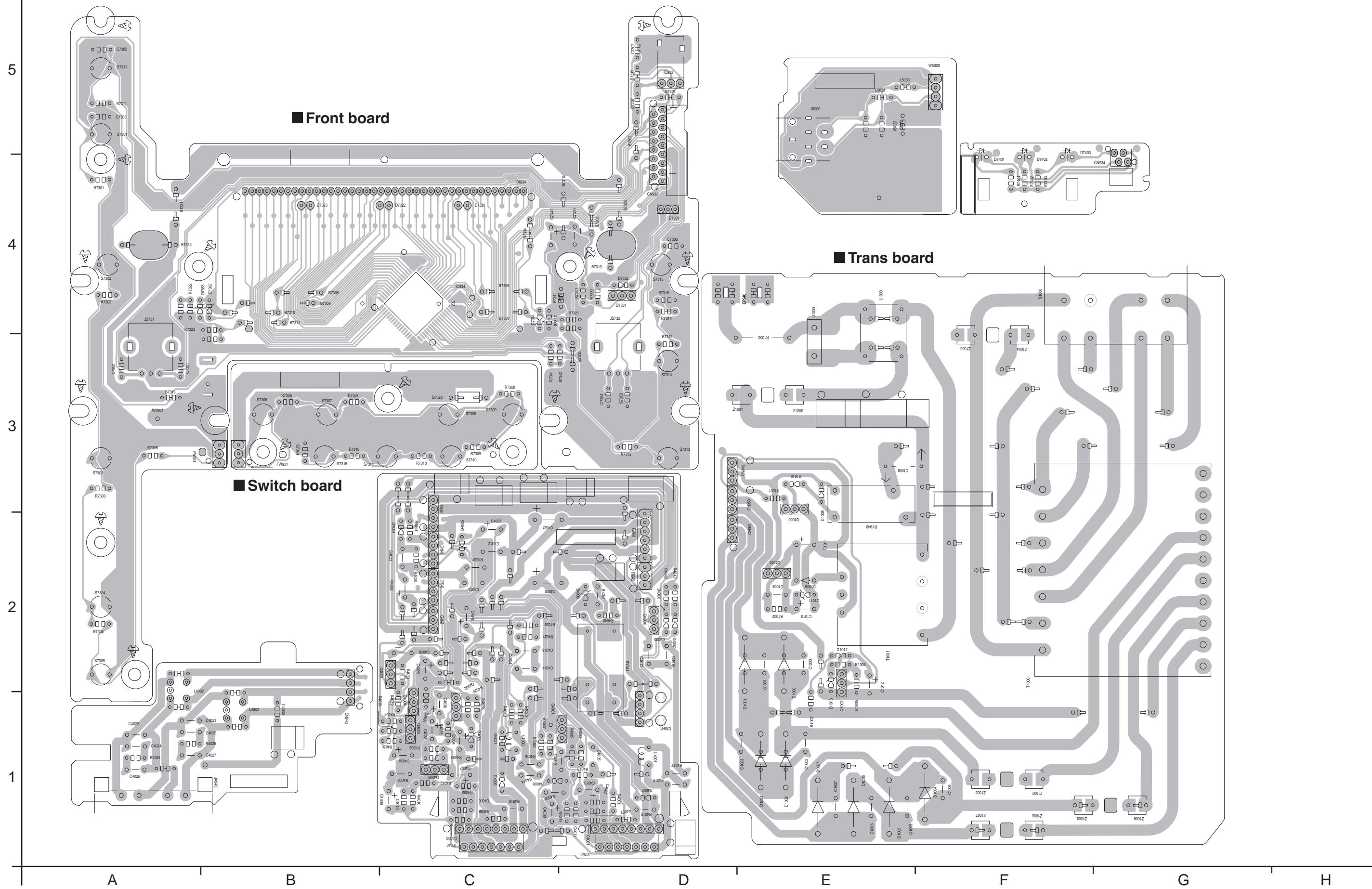
■ Sub woofer section

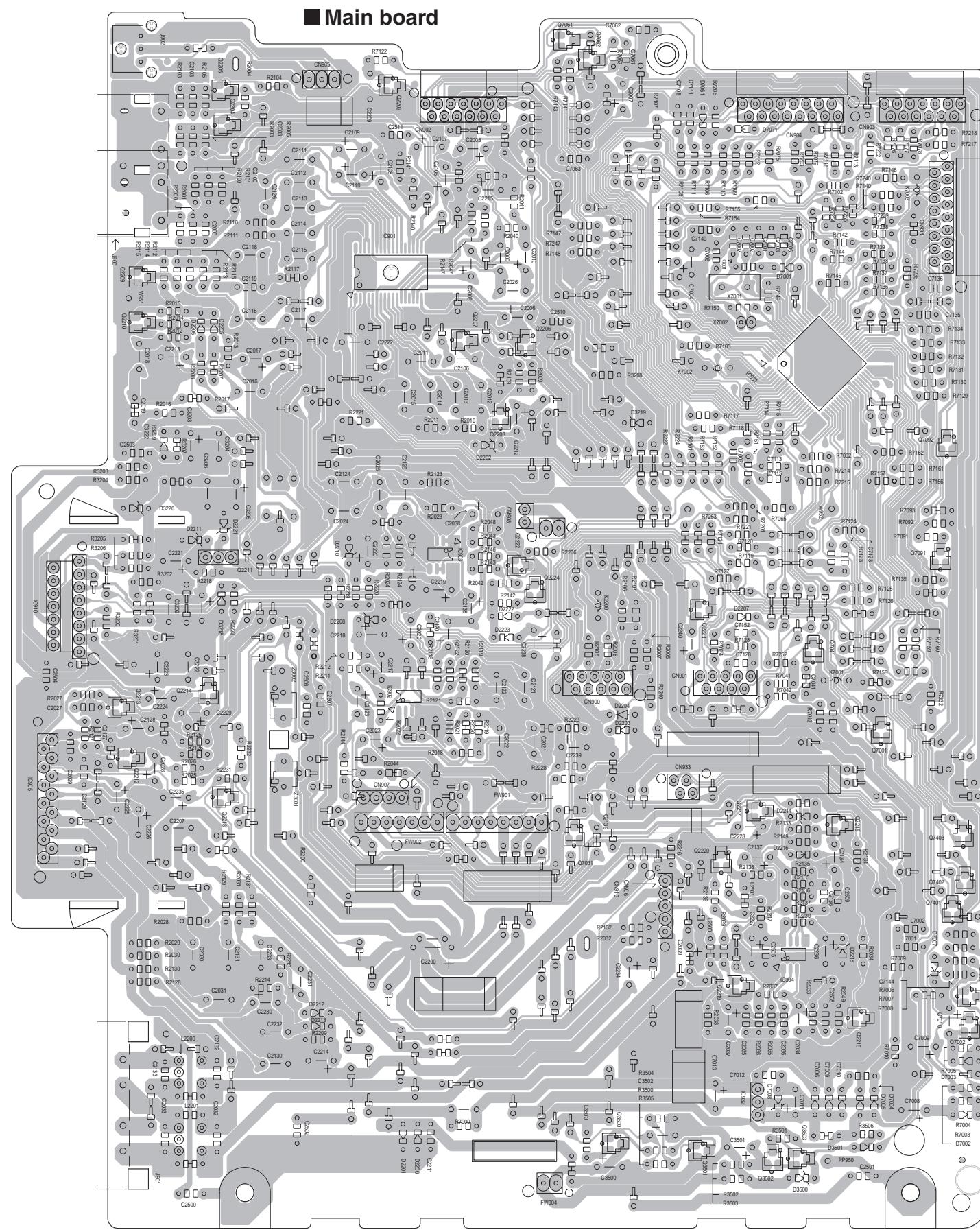
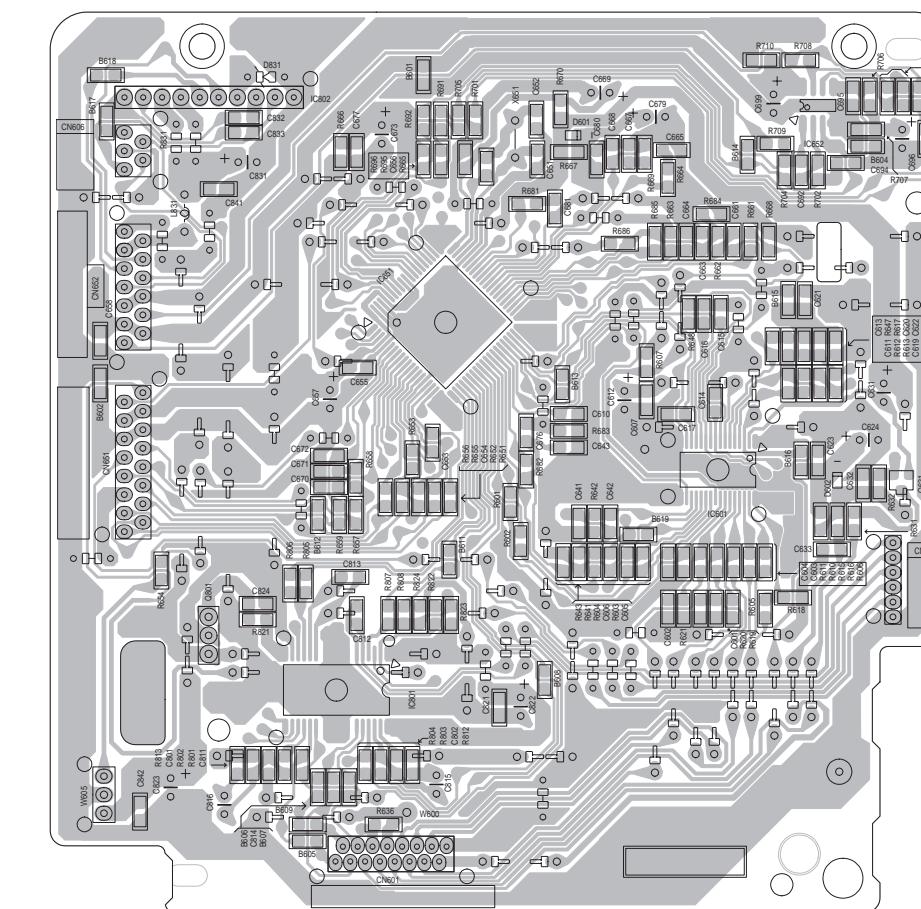
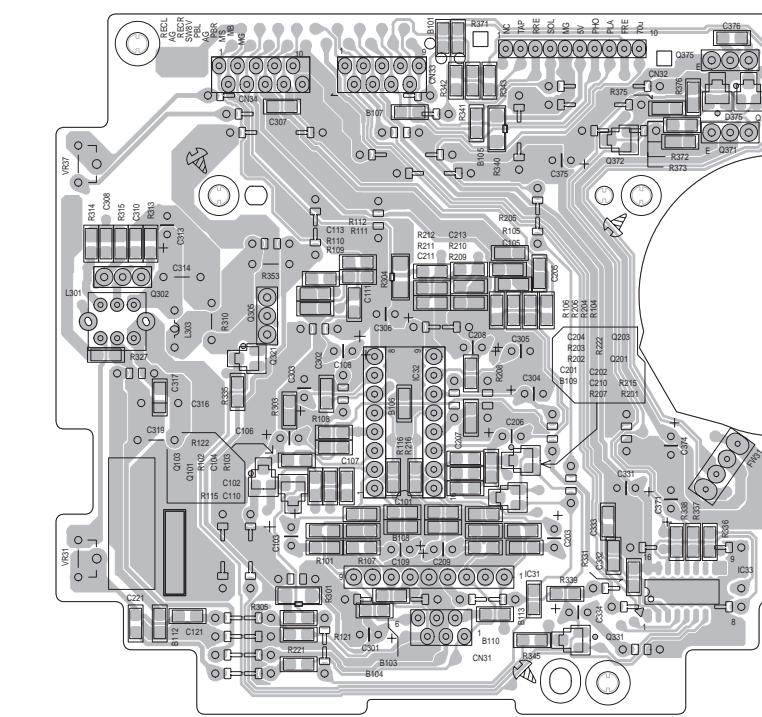


VERSION	FW945	CN947	L4002	L4003	C4022	C4023	C4024	C4025	R4024	R4025	C4026	C4027	C4014	C4015	C4016	C4017	C4034	C4035
J	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	O	O	
UF/UN/UP/US/ UT/UW/UX/UY	X	X	O	O	O	O	O	O	O	O	O	O	O	O	O	X	X	
B/E/EN/EV/EE/UB	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	X	X	

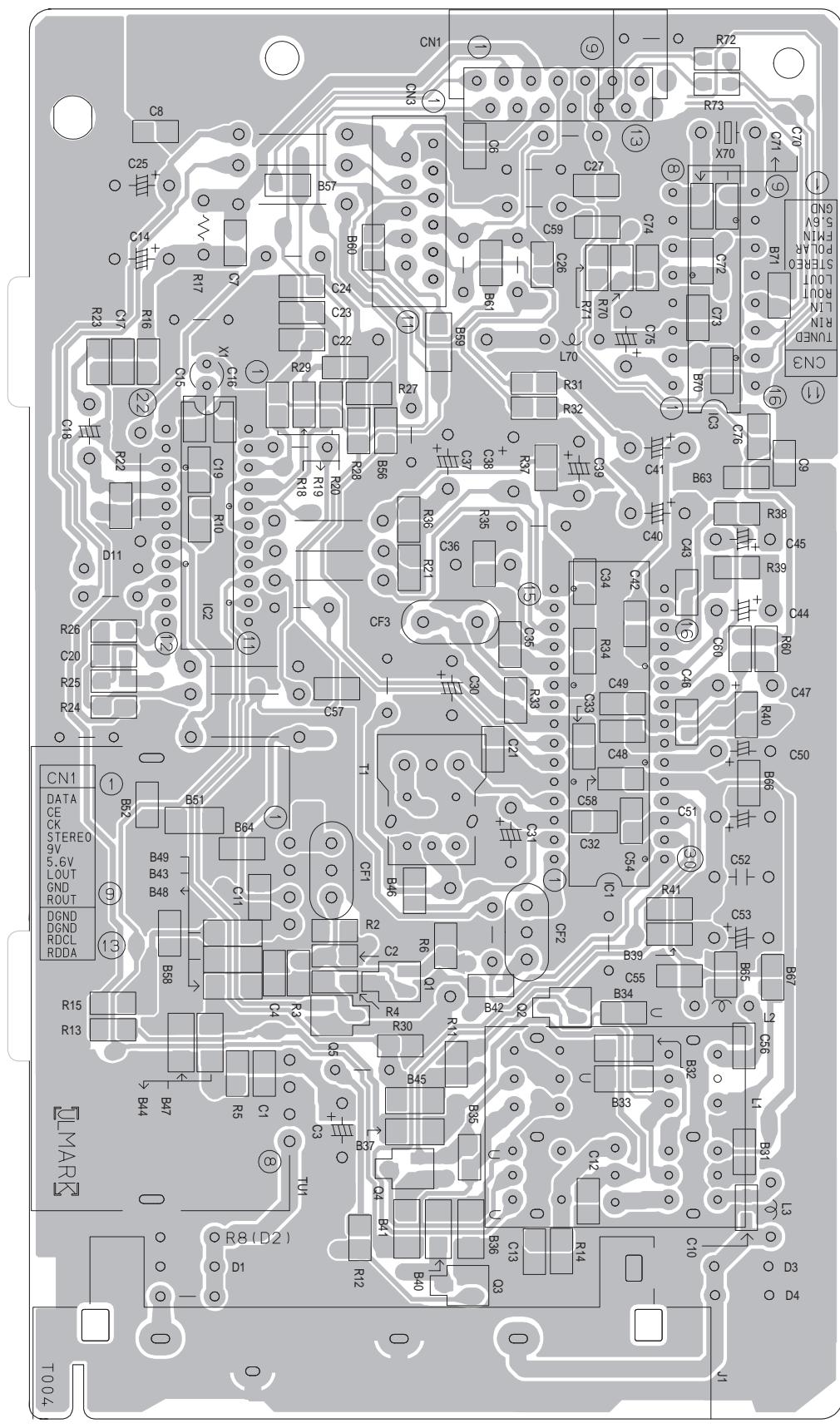
O = USED
X = NOT USED

Printed circuit boards



Main board**CD board****Cassette mechanism board**

■ Tuner board



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(No.22036SCH)

 Printed in Japan
WPC

PARTS LIST

[UX-P55]

* All printed circuit boards and its assemblies are not available as service parts.

Area suffix

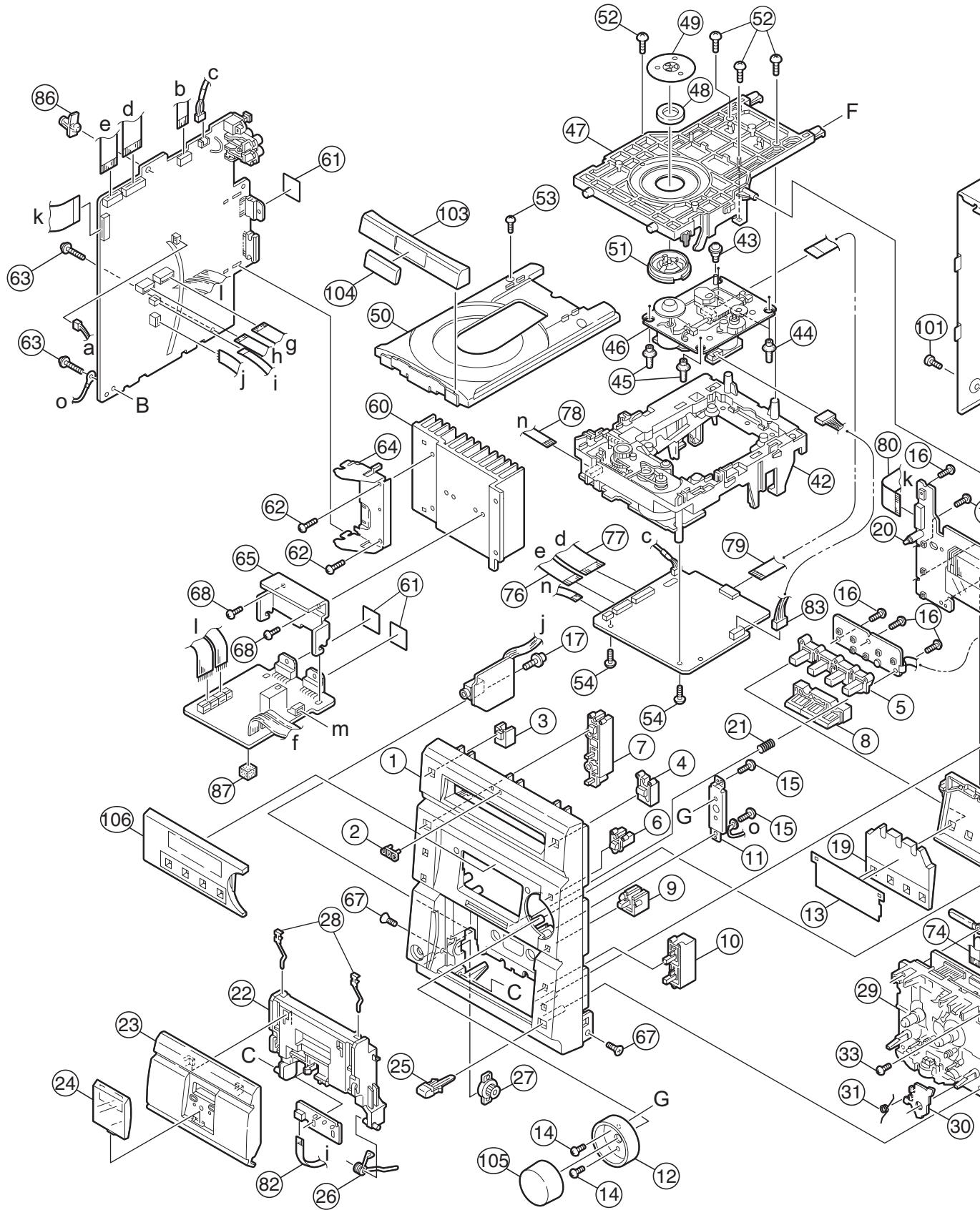
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E -----	Continental Europe
EN -----	Northern Europe

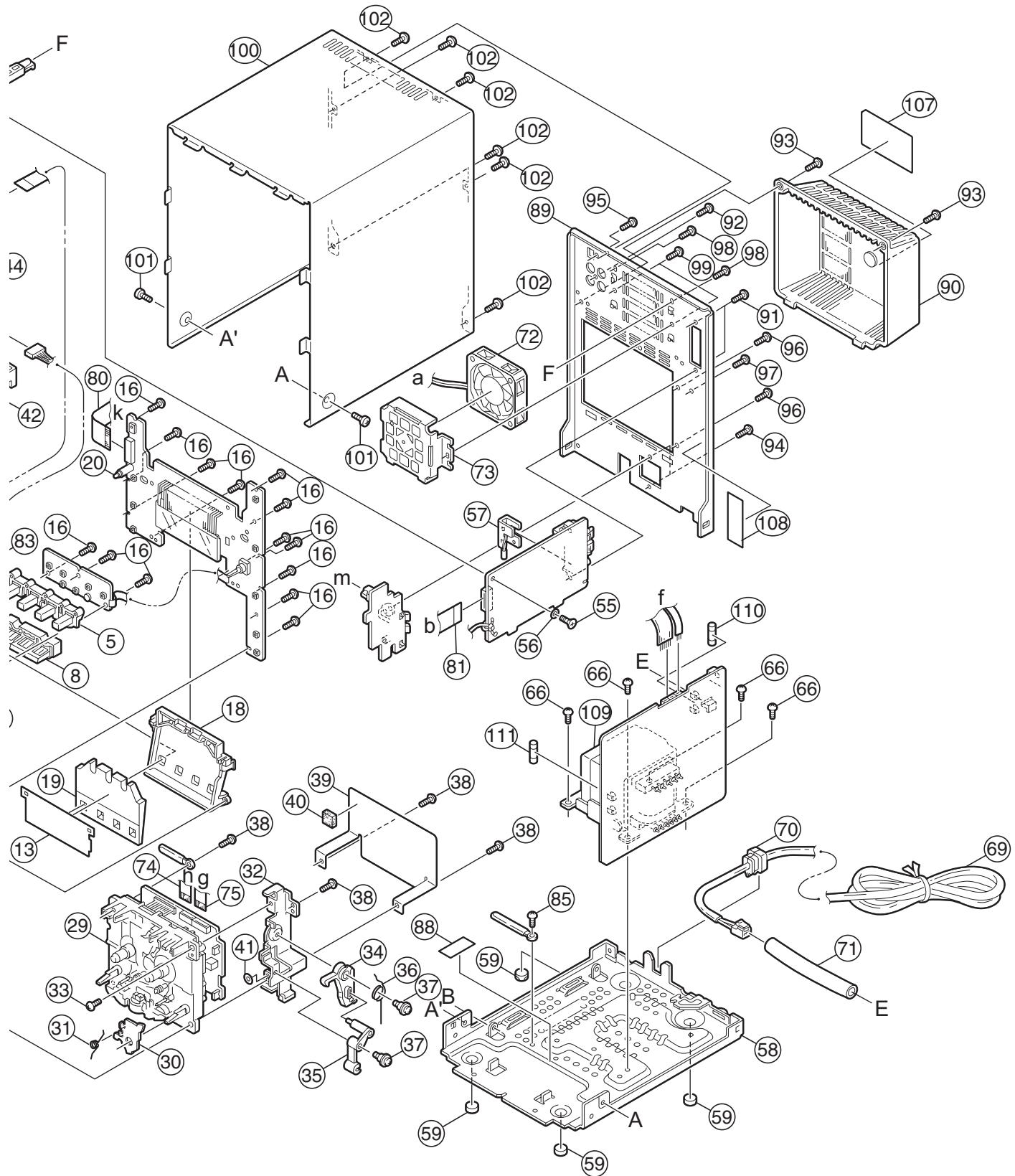
- Contents -

Exploded view of general assembly and parts list (Block No.M1)	3- 2
Speaker assembly and parts list (Block No.M2)	3- 5
CD loading base assembly and parts list (Block No.MD)	3- 6
Cassette mechanism assembly and parts list (Block No.MP)	3- 8
Electrical parts list (Block No.01~06)	3-10
Packing materials and accessories parts list (Block No.M3)	3-18

Exploded view of general assembly and parts list

Block No. M 1 M M





General assembly

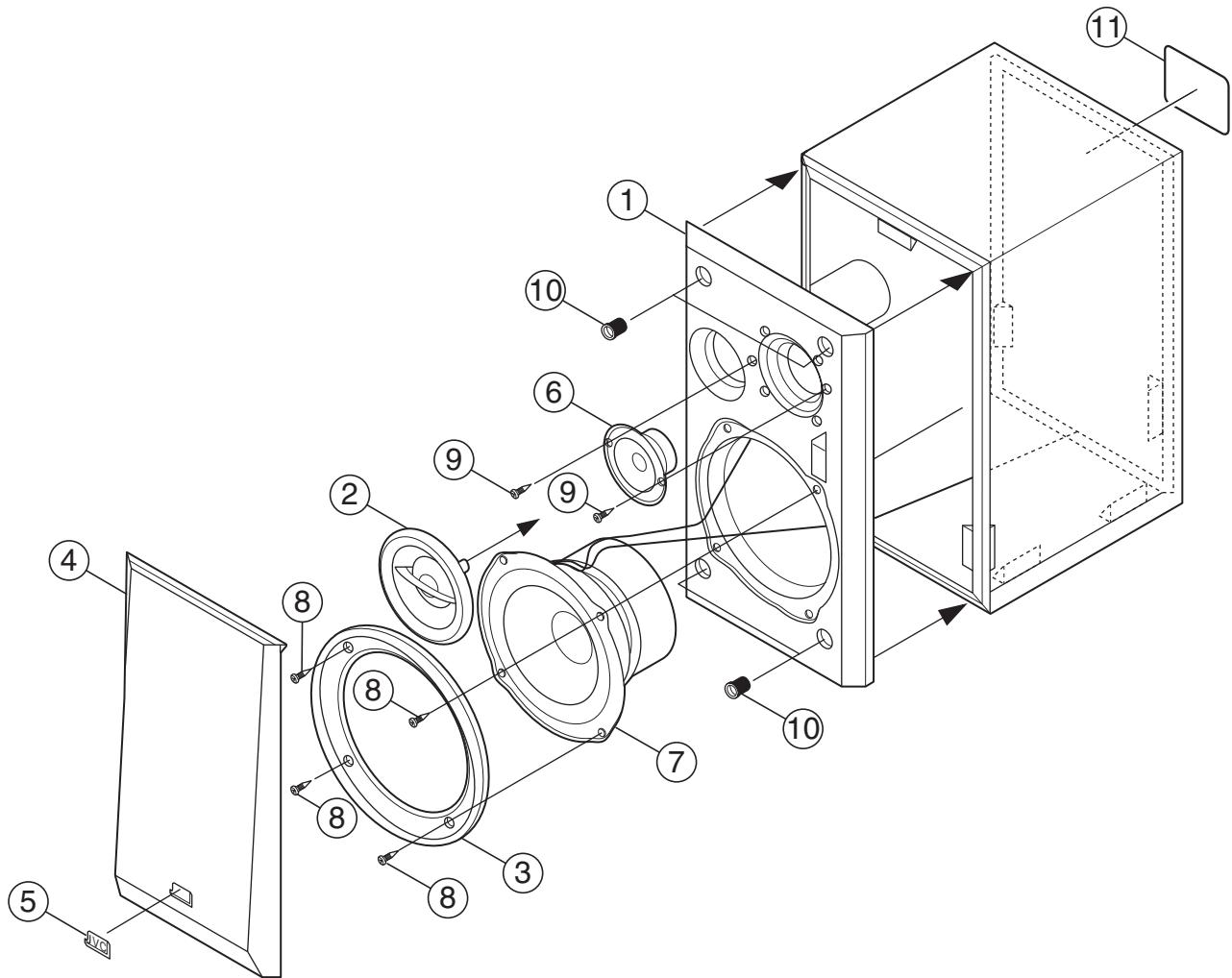
Block No. [M][1][M][M]

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
1	GV10064-018A	FRONT PANEL			73	GV30169-002A	FAN BRACKET		
2	GV40077-002A	JVC BADGE			74	QUQ412-0914CJ	CARD WIRE		
3	GV40147-001A	REMOTE LENS			75	QUQ412-1018CJ	FFC WIRE		
4	GV40150-003A	CD EJECT BTNN.			76	QUQ412-1314DJ	CARD WIRE		
5	GV30158-001A	FUNCTION BTN.			77	QUQ412-1614DJ	CARD WIRE		
6	GV40153-003A	SOUND BUTTON			78	QUQ412-0507DJ	CARD WIRE		
7	GV30156-003A	BUTTON B			79	QUQ110-1609AJ	CARD WIRE		
8	GV30159-005A	CONTROL BTN.			80	QUQ412-1710DJ	CARD WIRE		
9	GV40149-003A	BUTTON A			81	QUQ412-1332DJ	CARD WIRE		
10	GV40151-004A	CASS.BUTTON			82	QUQ412-0426CJ	CARD WIRE		
11	GV40158-001A	ORNAMENT BKT.			83	QJJ010-060801	WIRE		
12	GV40156-002A	VOL.ORNAMNET A			85	QYSBST3004Z	SCREW	3mm x 4mm	
13	GV40179-001A	VCD SHEET			86	GV40223-001A	PUSH SPACER		
14	QYSBSG3006Z	TAP SCREW	3mm x 6mm(x2)		87	GV40170-004A	SPACER		
15	QYSBSF3008Z	SCREW	3mm x 8mm(x2)		88	VYSA1R4-100	SPACER		
16	QYSBSF3008Z	SCREW	3mm x 8mm(x14)		89	GV10067-003A	REAR PANEL		
17	E65923-003	TAPPING SCREW			90	GV10068-005A	REAR COVER		
18	GV30162-001A	LCD HOLDER			91	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm(x2)	
19	GV40173-002A	LCD LENS			92	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm	
20	GV40194-001A	LED HOLDER			93	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm(x2)	
21	GV40212-001A	SPRING			94	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm(x2)	
22	GV20109-001A	CASS.HOLDER			95	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm	
23	GV20110-001A	DOOR COVER			96	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm(x2)	
24	GV40160-003A	DOOR LENS			97	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm	
25	GV30178-008A	CASS EJECT BTN.			98	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm(x2)	
26	GV40262-001A	DOOR SPRING			99	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm(x2)	
27	GV40034-001A	DAMPER ASSY.			100	GV10069-001A/S	METAL COVER		
28	VKY4180-401	CASSETTE SPRING	(x2)		101	QYSDSG3006M	T. SCREW	3mm x 6mm(x2)	
29	-----	C.MECHA ASSY			102	QYSBSGY3008E	SPECIAL SCREW	3mm x 8mm(x6)	
30	VKL7850-002	EJECT SAFTY(R)			103	GV30165-005A	TRAY FITTING B		
31	VKW5258-003	TORSION SPRING			104	GV40166-003A	FITTING LENS		
32	GV30224-001A	MECHA BRACKET			105	GV40154-002A	VOL.KNOB(A)		
33	QYSBSG3008Z	TAPPING SCREW	3mm x 8mm		106	GV30160-007A	FRONT LENS A		
34	GV40238-003A	EJECT ARM A			107	GV30467-001A	RATING LABEL		
35	GV40239-001A	EJECT ARM B			108	LV41843-001A	LASER CAUTION		
36	GV40254-002A	EJECT SPRING			△ 109	QQT0323-002	POWER TRANSF	T 1000	
37	VKZ4341-205	SPECIAL SCREW	(x2)		△ 110	QMF51W2-1R0-J8	FUSE	F 1000 1A AC250V	
38	QYSBSF3012Z	TAP SCREW	3mm x 12mm(x4)		△ 111	QMF51W2-1R0-J8	FUSE	F 1001 1A AC250V	
39	GV30124-002A	TRANS SHIELD							
40	GV40170-003A	SPACER							
41	LV30226-025A	SPACER							
42	-----	LOADING							
43	E406293-001	SPECIAL SCREW							
44	GV40196-001A	INSULATOR	(x2)						
45	GV40196-002A	INSULATOR	(x2)						
46	KSM-213CCMJ	CD MECHA ASSY.							
47	GV10066-001A	CLAMPER BASE							
48	VYH7313-005	MAGNET							
49	E306836-223SS	CD YOKE (JES)							
50	VYH1240-001	TRAY							
51	GV30202-001A	CD CLAMPER							
52	QYSBSF3008Z	SCREW	3mm x 8mm(x4)						
53	QYSBSF3008Z	SCREW	3mm x 8mm						
54	QYSBSF3008Z	SCREW	3mm x 8mm(x2)						
55	QYSSSF3008Z	SCREW	3mm x 8mm						
56	GV40122-003A	FOOT SPACER							
57	GV40211-001A	EARTH PLATE							
58	GV10065-001A	CHASSIS BASE							
59	GV40184-001A	FOOT SPACER	(x4)						
60	GV30194-003A	HEAT SINK C							
61	GV40206-001A	MICA SHEET(A)	(x3)						
62	QYSBSF3012Z	TAP SCREW	3mm x 12mm(x2)						
63	QYSBSFG3016Z	SCREW	3mm x 16mm(x2)						
64	GV30168-003A	IC BRACKET							
65	GV30193-002A	IC HOLDER							
66	QYSBST4006Z	SCREW	4mm x 6mm(x4)						
67	QYSSST3008Z	SCREW	3mm x 8mm(x2)						
68	QYSBSF3012Z	TAP SCREW	3mm x 12mm(x2)						
△ 69	QMPN150-200-JC	POWER CORD(EU)	2m BLACK	P55B					
△ 69	QMPK210-205-JN	POWER CORD(EU)	2.05m BLACK	P55E, P55EN					
△ 70	QZW0033-001	STRAIN RELIEF							
71	QWTBG00-150	VINYL TUBE							
72	QAR0170-001	FAN							

Speaker assembly and parts list

(SP-UXP55)

Block No. [M][2][M][M]



Speaker

Block No. [M][2][M][M]

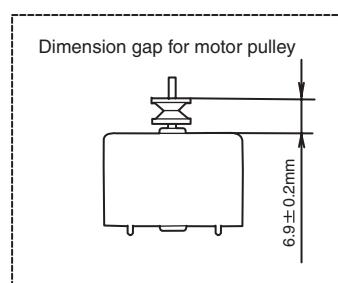
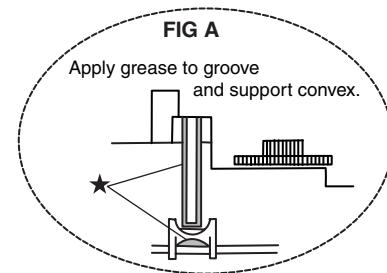
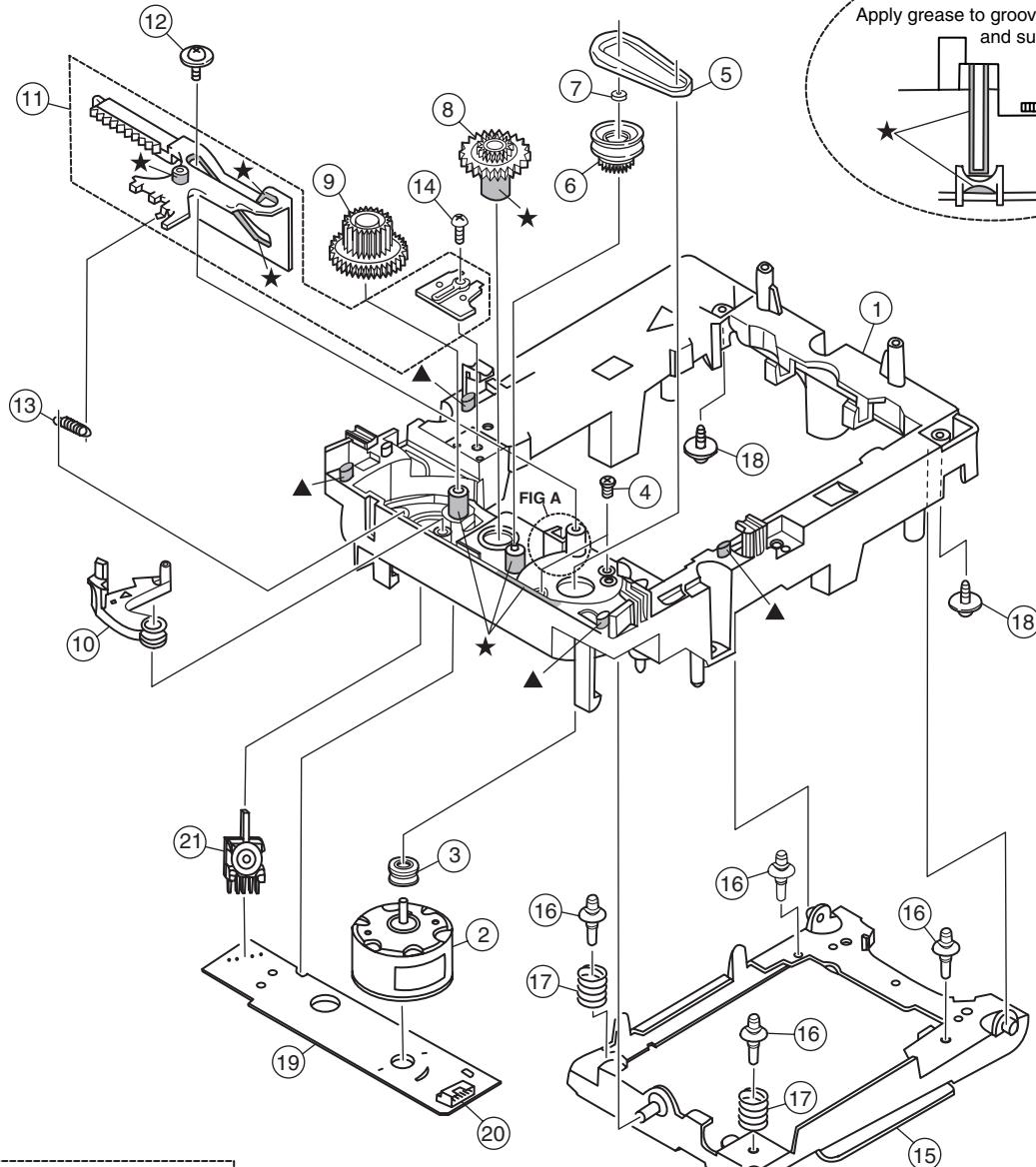
△ Symbol No.	Part No.	Part Name	Description	Local
1	507LSPK208	BAFFLE(L)		
1	507RSPK208	BAFFLE(R)		
2	401SPK208T	ORNAMENT	(x2)	
3	401SPK208W	ORNAMENT	(x2)	
4	9031GSPK208	CLOTH FRAME ASSY	(x2)	
5	400SPK208	BADGE JVC	(x2)	
6	T04J0XP550400	TWEETER	(x2)	
7	W12J0XP551200	WOOFER	(x2)	
8	300N4402000	SCREW	(x8)	
9	300B8401200	SCREW	(x4)	
10	429B1819	CATCHER	(x8)	
11	618LSPK208	BACK LABEL(L)		
11	618RSPK208	BACK LABEL(R)		

CD loading base assembly and parts list

LOAD-JEM-2M

Block No. M D M M

Grease
 ★ = G-474C
 ▲ = EBS0006-009B



CD loading mechanism

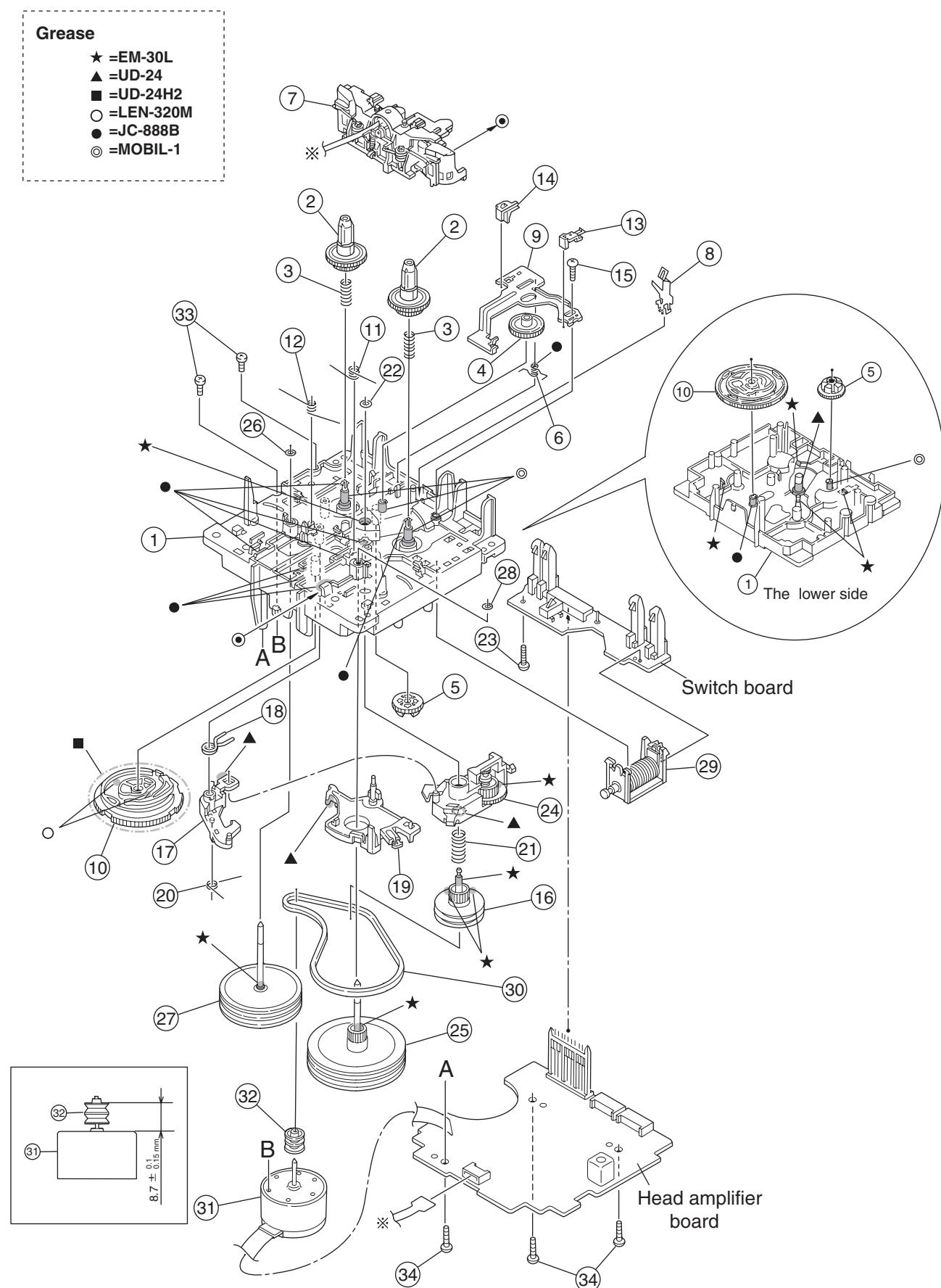
Block No. [M][D][M][M]

△ Symbol No.	Part No.	Part Name	Description	Local
1	VYH1238-001	LOADING BASE		
2	MMN-6F1LB8K	MOTOR		
3	QGF1201F3-05	CONNECTOR	FFC/FPC (1-5)	
4	QSW0472-001	SWITCH		
5	QYSPSPT2640Z	SCREW	2.6mm x 4mm(x2)	
6	E75984-221SS	MOTOR PULLEY		
7	E75950-002	C.D BELT		
8	E75985-221SS	C.D GEAR (1)		
9	E75986-221SS	C.D GEAR (2)		
10	E75987-221SS	C.D GEAR (3)		
11	E307162-331SS	LEVER		
12	E307252-331SS	CAM PLATE		
13	E65923-003	TAPPING SCREW	(x3)	
14	VYH7787-001	SPRING		
15	QYSBSF3008Z	SCREW	3mm x 8mm	
16	E307179-222SM	E.BASE ASSY		
17	E60912-005SS	SPEED NUT		
18	VMW1329-102	P W BOARD (1/5)		

Cassette mechanism assembly and parts list

Block No. M P M M

SLC-S21M



Cassette mechanism

Block No. [M][P][M][M]

△ Symbol No.	Part No.	Part Name	Description	Local
1	VKS1165-00J	CHASSIS B. ASSY		
2	VKS2274-002	REEL GEAR	(x2)	
3	VKW5286-002	B.T. SPRING	(x2)	
4	VKS5559-001	PLAY IDLE GEAR		
5	VKS5597-00B	BLIND		
6	VKW5296-001	EARTH SPRING		
7	SLC-RP1SVM	H.M.BASE ASSY		
8	VKY3149-002	CASSETTE SP.		
9	LV31786-001A	PLAY SW LEVER		
10	VKS1166-003	CONTROL CAM		
11	VKW5279-001	HEAD BASE SP(R)		
12	VKW5280-001	HEAD BASE SP(L)		
13	LV41584-001A	BRAKE(R)		
14	LV41585-002A	BRAKE(L)		
15	QYSBSF2005Z	SCREW	2mm x 5mm	
16	VKS5603-00G	MAIN PULLEY ASY		
17	VKS3785-001MM	FR ARM		
18	VKW5284-002	SWING SPRING		
19	VKS2278-003	TRIGGER ARM		
20	VKW5301-001	FR SPRING		
21	VKW5266-001	ELEVATOR SPRING		
22	WDL214025	WASHER		
23	QYSBSF2005Z	SCREW	2mm x 5mm	
24	VKS3786-00G	CLUTCH ASSY		
25	VKF3205-00B	F.WHEEL ASSY(R)		
26	WDL183425	SLIT WASHER		
27	VKF3207-00B	F.WHEEL ASSY(L)		
28	WDL173525-6	SLIT WASHER		
29	VKZ3174-00A	DC SOLENOID		
30	LV42234-001A	CAPSTAN BELT		
31	MSI-5U2LWA	D.C.MOTOR		
32	VKR4761-001	MOTOR PULLEY		
33	QYSPSP2604Z	SCREW	2.6mm x 4mm(x2)	
34	QYSBSF2608Z	TAPPING SCREW	2.6mm x 8mm(x3)	

Electrical parts list

Front board

Block No. [0][1][0][0]

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
IC933	GP1U261X	IR DETECT UNIT			C4008	QETN1HM-476Z	E CAPACITOR	47uF 50V M	
IC934	NJU6433FG1	LCD DRIVER			C4009	QETN1HM-476Z	E CAPACITOR	47uF 50V M	
IC940	TDA7294	IC			C4010	QCSB1HJ-100Y	C CAPACITOR	10pF 50V J	
IC941	TDA7294	IC			C4011	QCSB1HJ-100Y	C CAPACITOR	10pF 50V J	
Q1000	2SC2785/FE-T	TRANSISTOR			C4012	QFLC1HJ-223Z	M CAPACITOR	0.022uF 50V J	
Q1001	2SC2235/OY-T	TRANSISTOR			C4013	QTE1V06-106Z	E CAPACITOR	10uF 35V	
Q1002	KTC3199/GL-T	TRANSISTOR			C4014	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J	
Q4000	2SC3576-JVC-T	TRANSISTOR			C4015	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J	
Q4001	2SC3576-JVC-T	TRANSISTOR			C4016	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J	
Q4002	KRA102M-T	DIGI TRANSISTOR			C4017	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J	
Q4003	KTC3199/GL-T	TRANSISTOR			C4018	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
Q4004	KTA1267/YG-T	TRANSISTOR			C4019	QETN1HM-106Z	E CAPACITOR	10uF 50V M	
Q4005	KTC3199/GL-T	TRANSISTOR			△ C4020	QETN1HM-228	E CAPACITOR	2200uF 50V M	
Q4006	KTC3199/GL-T	TRANSISTOR			△ C4021	QETM1HM-228	E CAPACITOR	2200uF 50V M	
Q7331	KRC111M-T	TRANSISTOR			C4022	QCB31HK-272Z	C CAPACITOR	2700pF 50V K	
△ D1000	1N4003S-T5	SI DIODE			C4023	QCB31HK-272Z	C CAPACITOR	2700pF 50V K	
△ D1001	1N4003S-T5	SI DIODE			C4024	QFLC1HJ-223Z	M CAPACITOR	0.022uF 50V J	
△ D1002	1N4003S-T5	SI DIODE			C4025	QFLC1HJ-223Z	M CAPACITOR	0.022uF 50V J	
△ D1003	1N4003S-T5	SI DIODE			C4026	QFLC1HJ-223Z	M CAPACITOR	0.022uF 50V J	
△ D1004	1N5401-TM	SI DIODE			C4027	QFLC1HJ-223Z	M CAPACITOR	0.022uF 50V J	
△ D1005	1N5401-TM	SI DIODE			C4028	EETC1EM-226ZJC	E CAPACITOR		
△ D1006	1N5401-TM	SI DIODE			C4029	QETN1CM-476Z	E CAPACITOR	47uF 16V M	
△ D1007	1N5401-TM	SI DIODE			C4030	QETN1HM-226Z	E CAPACITOR	22uF 50V M	
D1008	1SS133-T2	SI DIODE			C4031	QCF31HZ-223Z	C CAPACITOR	0.022uF 50V Z	
D1009	1N4003S-T5	SI DIODE			C4032	QETN1HM-105Z	E CAPACITOR	1uF 50V M	
D1010	1SS133-T2	SI DIODE			C4033	QFVJ1HJ-184Z	MF CAPACITOR	0.18uF 50V J	
D1011	MTZJ6.8B-T2	Z DIODE			C4036	EETC1HM-106ZJC	E CAPACITOR		
D1012	1SS133-T2	SI DIODE			C4037	QTE1V06-106Z	E CAPACITOR	10uF 35V	
D1013	MTZJ5.1B-T2	Z DIODE			C4038	QTE1V06-106Z	E CAPACITOR	10uF 35V	
D4000	1SS133-T2	SI DIODE			C5010	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
D4001	1SS133-T2	SI DIODE			C5011	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
D4002	1SS133-T2	SI DIODE			C7301	QEKC1CM-476Z	E CAPACITOR	47uF 16V M	
D4003	1SS133-T2	SI DIODE			C7302	QDGB1HK-102Y	C CAPACITOR	1000pF 50V K	
D4004	1SS133-T2	SI DIODE			C7303	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
D4006	1SS133-T2	SI DIODE			C7304	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
D4007	1SS133-T2	SI DIODE			C7305	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
D4008	MTZJ24C-T2	Z DIODE			C7306	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
D4009	MTZJ5.1B-T2	Z DIODE			C7307	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
D7321	QLMP-AB49	BLUE LED			C7341	QEKC1AM-107Z	E CAPACITOR	100uF 10V M	
D7322	QLMP-AB49	BLUE LED			C7351	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
D7323	QLMP-AB49	BLUE LED			C7352	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
D7331	SPR-39MVWF	LED	RED-GREEN		R1001	QRE141J-332Y	C RESISTOR	3.3kΩ 1/4W J	
D7332	1SS133-T2	SI DIODE			R1002	QRE141J-821Y	C RESISTOR	820Ω 1/4W J	
D7361	MTZJ10C-T2	Z DIODE			R1003	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
D7362	MTZJ10C-T2	Z DIODE			R1004	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
D7363	MTZJ10C-T2	Z DIODE			R1005	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
D7401	SLR-342MC-T	LED			R4000	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
D7402	SLR-342VC-T	LED			R4001	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
D7403	SLR-342MC-T	LED			R4002	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
C1000	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J		R4003	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
C1001	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J		R4004	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
C1002	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J		R4005	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
C1003	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J		R4006	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
C1004	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J		R4007	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
C1005	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J		R4008	QRJ146J-821X	UNF C RESISTOR	820Ω 1/4W J	
C1006	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J		R4009	QRJ146J-821X	UNF C RESISTOR	820Ω 1/4W J	
C1007	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J		R4010	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
△ C1008	QCZ9105-472	C CAPACITOR	4700pF		R4011	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
C1009	QFLC1HJ-472Z	M CAPACITOR	4700pF 50V J		R4012	QRE141J-122Y	C RESISTOR	1.2kΩ 1/4W J	
C1010	EETC1CM-477ZJC	E CAPACITOR			R4013	QRE141J-122Y	C RESISTOR	1.2kΩ 1/4W J	
C1011	QETB1EM-108	E CAPACITOR	1000uF 25V M		R4014	QRJ146J-100X	UNF C RESISTOR	10Ω 1/4W J	
C1012	QETC1EM-475Z	E CAPACITOR	4.7uF 25V M		R4015	QRJ146J-100X	UNF C RESISTOR	10Ω 1/4W J	
C4000	QCBB1HK-101Y	C CAPACITOR	100pF 50V K		R4016	QRJ146J-100X	UNF C RESISTOR	10Ω 1/4W J	
C4001	QCBB1HK-101Y	C CAPACITOR	100pF 50V K		R4017	QRJ146J-100X	UNF C RESISTOR	10Ω 1/4W J	
C4002	QTE1V06-106Z	E CAPACITOR	10uF 35V		R4018	QRT01DJ-R22X	MF RESISTOR	0.22Ω 1W J	
C4004	QETN1HM-226Z	E CAPACITOR	22uF 50V M		R4019	QRT01DJ-R22X	MF RESISTOR	0.22Ω 1W J	
C4005	QETN1HM-226Z	E CAPACITOR	22uF 50V M		R4020	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
C4006	QCBB1HK-101Y	C CAPACITOR	100pF 50V K		R4021	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
C4007	QCBB1HK-101Y	C CAPACITOR	100pF 50V K		R4022	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
					R4023	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
					R4024	QRE141J-4R7Y	C RESISTOR	4.7Ω 1/4W J	
					R4025	QRE141J-4R7Y	C RESISTOR	4.7Ω 1/4W J	
					R4026	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R4027	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J		S7304	QSW0825-001Z	TACT SW		
R4028	QRE141J-301Y	C RESISTOR	300Ω 1/4W J		S7305	QSW0825-001Z	TACT SW		
R4029	QRE141J-823Y	C RESISTOR	82kΩ 1/4W J		S7306	QSW0825-001Z	TACT SW		
R4030	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J		S7307	QSW0825-001Z	TACT SW		
R4031	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J		S7308	QSW0825-001Z	TACT SW		
R4032	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J		S7309	QSW0825-001Z	TACT SW		
R4033	QRE141J-124Y	C RESISTOR	120kΩ 1/4W J		S7310	QSW0825-001Z	TACT SW		
R4034	QRE141J-122Y	C RESISTOR	1.2kΩ 1/4W J		S7311	QSW0825-001Z	TACT SW		
R4035	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J		S7312	QSW0825-001Z	TACT SW		
R4036	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J		S7313	QSW0825-001Z	TACT SW		
△ R4037	QRZ9006-4R7X	F.RESITOR	4.7Ω		S7314	QSW0825-001Z	TACT SW		
R4038	QRE141J-302Y	C RESISTOR	3kΩ 1/4W J		S7315	QSW0825-001Z	TACT SW		
R4040	QRE141J-330Y	C RESISTOR	33Ω 1/4W J		S7316	QSW0825-001Z	TACT SW		
R4041	QRL01DJ-471X	OMF RESISTOR	470Ω 1W J		Z1000	QNG0020-001Z	FUSE CLIP		
R4042	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J		Z1001	QNG0020-001Z	FUSE CLIP		
R4043	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J		Z1002	QNG0020-001Z	FUSE CLIP		
R4044	QRE141J-152Y	C RESISTOR	1.5kΩ 1/4W J		Z1003	QNG0020-001Z	FUSE CLIP		
R4045	QRE141J-203Y	C RESISTOR	20kΩ 1/4W J						
R7301	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J						
R7302	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J						
R7303	QRE141J-122Y	C RESISTOR	1.2kΩ 1/4W J						
R7304	QRE141J-152Y	C RESISTOR	1.5kΩ 1/4W J						
R7305	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J						
R7306	QRE141J-272Y	C RESISTOR	2.7kΩ 1/4W J						
R7307	QRE141J-392Y	C RESISTOR	3.9kΩ 1/4W J						
R7308	QRE141J-562Y	C RESISTOR	5.6kΩ 1/4W J						
R7309	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J						
R7310	QRE141J-183Y	C RESISTOR	18kΩ 1/4W J						
R7311	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J						
R7312	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J						
R7313	QRE141J-122Y	C RESISTOR	1.2kΩ 1/4W J						
R7315	QRE141J-153Y	C RESISTOR	15kΩ 1/4W J						
R7316	QRE141J-433Y	C RESISTOR	43kΩ 1/4W J						
R7321	QRE141J-301Y	C RESISTOR	300Ω 1/4W J						
R7322	QRE141J-301Y	C RESISTOR	300Ω 1/4W J						
R7323	QRE141J-301Y	C RESISTOR	300Ω 1/4W J						
R7331	QRE141J-161Y	C RESISTOR	160Ω 1/4W J						
R7332	QRE141J-470Y	C RESISTOR	47Ω 1/4W J						
R7341	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J						
R7342	QRE141J-134Y	C RESISTOR	130kΩ 1/4W J						
R7401	QRE141J-201Y	C RESISTOR	200Ω 1/4W J						
R7402	QRE141J-201Y	C RESISTOR	200Ω 1/4W J						
R7403	QRE141J-201Y	C RESISTOR	200Ω 1/4W J						
△ L1000	QQR1145-001	COIL							
L4000	QQLZ005-R45	COIL	0.45uH						
L4001	QQLZ005-R45	COIL	0.45uH						
L4002	QQR0797-001	COIL							
L4003	QQR0797-001	COIL							
L5030	QQL231K-470Y	COIL	47uH K						
L5033	QQL231K-470Y	COIL	47uH K						
△ T1001	QQT0253-002	POWER TRANSF							
CN932	QGF1205F1-17	CONNECTOR	FFC/FPC (1-17)						
CN934	QGF1205F1-04	CONNECTOR	FFC/FPC (1-4)						
CN941	QGB2510K2-04	CONNECTOR	B-B (1-4)						
CN943	QGB2510J1-04	CONNECTOR	B-B (1-4)						
CN944	QGD2504C1-04Z	CONNECTOR	(1-4)						
CN945	QGD2504C1-04Z	CONNECTOR	(1-4)						
CN946	QGD2504C1-04Z	CONNECTOR	(1-4)						
CN947	QGD2504C1-03Z	CONNECTOR	(1-3)						
CN949	QGD2504C1-03Z	CONNECTOR	(1-3)						
CN950	QGD2504C1-03Z	CONNECTOR	(1-3)						
CN951	QGD2504C1-03Z	CONNECTOR	(1-3)						
DI934	QLD0160-001	LCD MODULE							
EP940	E409182-001SM	GRAND TERMINAL							
FW931	QUM023-05Z4Z4	TM FLAT							
FW944	QUM156-17DGZ4	FLAT WIRE							
FW945	QUM153-17DGZ4	FLAT WIRE							
△ J1000	QGA7901C1-02	CONNECTOR	W-B (1-2)						
J5000	QNS0170-001	HEADPHONE JACK							
JA940	QNB0118-001	SPK.TERMINAL							
JS731	QSW0917-001	R ENCODER							
K5022	QQR0621-001Z	COIL							
△ RY940	QSK0124-001	RELAY							
RY941	QSK0109-001	RELAY							
S7302	QSW0825-001Z	TACT SW							
S7303	QSW0825-001Z	TACT SW							
					D2200	1SS133-T2	SI DIODE		
					D2201	1SS133-T2	SI DIODE		
					D2202	MTZJ6.8B-T2	Z DIODE		
					D2203	1SS133-T2	SI DIODE		
					D2204	1N4003S-T5	SI DIODE		
					D2205	1SS133-T2	SI DIODE		
					D2206	1SS133-T2	SI DIODE		
					D2218	MTZJ4.3B-T2	Z DIODE		
					D3218	1SS133-T2	SI DIODE		
					D3219	MTZJ8.2C-T2	Z DIODE		
					D3220	MTZJ11B-T2	Z DIODE		
					D3221	MTZJ11B-T2	Z DIODE		
					D7001	1SS133-T2	SI DIODE		
					D7002	1SS133-T2	SI DIODE		
					D7003	1SS133-T2	SI DIODE		

Main board

Block No. [0][2][0][0]

△ Symbol No.	Part No.	Part Name	Description	Local
IC901	LC75345M-X	IC		
IC904	BA15218F-XE	IC		
IC910	L4909	REGULATOR IC		
IC931	UPD78005GC-045	MASK ROM		
IC932	KIA78S06P-T	IC		
Q2203	2SC2412K/R-X	TRANSISTOR		
Q2204	2SC2412K/R-X	TRANSISTOR		
Q2205	2SC2412K/R-X	TRANSISTOR		
Q2206	2SC2412K/R-X	TRANSISTOR		
Q2207	2SC2412K/R-X	TRANSISTOR		
Q2208	DTA143EKA-X	CHIP D.TRANSISTOR		
Q2209	2SC2412K/R-X	TRANSISTOR		
Q2210	2SC2412K/R-X	TRANSISTOR		
Q2211	2SC2001/LK1-T	TRANSISTOR		
Q2215	2SC2412K/R-X	TRANSISTOR		
Q2216	2SC2412K/R-X	TRANSISTOR		
Q2217	DTA144EKA-X	TRANSISTOR		
Q2219	2SC2412K/R-X	TRANSISTOR		
Q2220	2SC2412K/R-X	TRANSISTOR		
Q2221	DTC114EKA-X	TRANSISTOR		
Q3500	2SA1037AK/R-X	TRANSISTOR		
Q3501	DTC144EKA-X	DIGI TRANSISTOR		
Q7001	2SA1037AK/RS/-X	TRANSISTOR		
Q7002	DTC114TKA-X	TRANSISTOR		
Q7003	2SC2412K/R-X	TRANSISTOR		
Q7031	2SC2412K/R-X	TRANSISTOR		
Q7041	2SC2412K/R-X	TRANSISTOR		
Q7061	DTC114TKA-X	TRANSISTOR		
Q7062	DTC114TKA-X	TRANSISTOR		
Q7091	DTC114EKA-X	TRANSISTOR		
Q7092	2SA1037AK/RS/-X	TRANSISTOR		
Q7401	DTC114EKA-X	TRANSISTOR		
Q7402	DTC114EKA-X	TRANSISTOR		
Q7403	DTC114EKA-X	TRANSISTOR		
D2200	1SS133-T2	SI DIODE		
D2201	1SS133-T2	SI DIODE		
D2202	MTZJ6.8B-T2	Z DIODE		
D2203	1SS133-T2	SI DIODE		
D2204	1N4003S-T5	SI DIODE		
D2205	1SS133-T2	SI DIODE		
D2206	1SS133-T2	SI DIODE		
D2218	MTZJ4.3B-T2	Z DIODE		
D3218	1SS133-T2	SI DIODE		
D3219	MTZJ8.2C-T2	Z DIODE		
D3220	MTZJ11B-T2	Z DIODE		
D3221	MTZJ11B-T2	Z DIODE		
D7001	1SS133-T2	SI DIODE		
D7002	1SS133-T2	SI DIODE		
D7003	1SS133-T2	SI DIODE		

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
D7004	1SS133-T2	SI DIODE			C3206	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J	
D7005	1SS133-T2	SI DIODE			C3222	QFVJ1HJ-334Z	MF CAPACITOR	0.33uF 50V J	
D7006	1SS133-T2	SI DIODE			C3500	EETC1CM-106ZJC	E CAPACITOR		
D7007	MTZJ5.1C-T2	Z DIODE			C3502	EETC1EM-476ZJC	E CAPACITOR		
D7008	MTZJ6.2C-T2	Z DIODE			C7001	QCSB1HJ-200Y	C CAPACITOR	20pF 50V J	
D7009	1SS133-T2	SI DIODE			C7002	QCSB1HJ-220Y	C CAPACITOR	22pF 50V J	
D7010	1SS133-T2	SI DIODE			C7003	QDGB1HK-102Y	C CAPACITOR	1000pF 50V K	
D7061	1SS133-T2	SI DIODE			C7004	EEKC1AM-107ZJC	E CAPACITOR		
D7071	1SS133-T2	SI DIODE			C7005	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
C2000	QCBB1HK-221Y	C CAPACITOR	220pF 50V K		C7006	QCSB1HJ-180Y	C CAPACITOR	18pF 50V J	
C2003	QCBB1HK-221Y	C CAPACITOR	220pF 50V K		C7007	QCSB1HJ-180Y	C CAPACITOR	18pF 50V J	
C2005	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M		C7008	EETB0JM-228JC	E CAPACITOR		
C2006	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M		C7009	EETC1HM-225ZJC	E CAPACITOR		
C2007	QETN1HM-106Z	E CAPACITOR	10uF 50V M		C7010	EETC1HM-106ZJC	E CAPACITOR		
C2008	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M		C7011	EETC1CM-107ZJC	E CAPACITOR		
C2009	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M		C7012	QFCB1HZ-104Y	C CAPACITOR	0.1uF 50V Z	
C2010	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M		C7041	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
C2011	QFLC1HJ-272Z	M CAPACITOR	2700pF 50V J		C7061	QCBB1HK-151Y	C CAPACITOR	150pF 50V K	
C2012	QFVJ1HJ-104Z	MF CAPACITOR	0.1uF 50V J		C7063	QCBB1HK-151Y	C CAPACITOR	150pF 50V K	
C2013	QFVJ1HJ-104Z	MF CAPACITOR	0.1uF 50V J		C7108	QCBB1HK-101Y	C CAPACITOR	100pF 50V K	
C2014	QFVJ1HJ-184Z	MF CAPACITOR	0.18uF 50V J		C7111	QCBB1HK-101Y	C CAPACITOR	100pF 50V K	
C2015	QFVJ1HJ-184Z	MF CAPACITOR	0.18uF 50V J		C7113	QCBB1HK-151Y	C CAPACITOR	150pF 50V K	
C2016	QFVJ1HJ-154Z	MF CAPACITOR	0.15uF 50V J		C7115	QCBB1HK-101Y	C CAPACITOR	100pF 50V K	
C2017	QTE1C06-226Z	E CAPACITOR	22uF 16V		C7123	QDGB1HK-102Y	C CAPACITOR	1000pF 50V K	
C2018	QFVJ1HJ-154Z	MF CAPACITOR	0.15uF 50V J		C7128	QDGB1HK-102Y	C CAPACITOR	1000pF 50V K	
C2019	QFVJ1HJ-274Z	MF CAPACITOR	0.27uF 50V J		C7135	QCBB1HK-101Y	C CAPACITOR	100pF 50V K	
C2026	QFLC1HK-123Z	M CAPACITOR	0.012uF 50V J		C7136	QCBB1HK-101Y	C CAPACITOR	100pF 50V K	
C2034	QETN1HM-225Z	E CAPACITOR	2.2uF 50V M		C7144	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M	
C2035	QCBB1HK-471Y	C CAPACITOR	470pF 50V K		C7149	QCBB1HK-101Y	C CAPACITOR	100pF 50V K	
C2036	QCBB1HK-151Y	C CAPACITOR	150pF 50V K		C7152	QDGB1HK-102Y	C CAPACITOR	1000pF 50V K	
C2037	QETN1AM-107Z	E CAPACITOR	100uF 10V M		R2000	QRE141J-303Y	C RESISTOR	30kΩ 1/4W J	
C2100	QCBB1HK-221Y	C CAPACITOR	220pF 50V K		R2001	QRE141J-303Y	C RESISTOR	30kΩ 1/4W J	
C2103	QCBB1HK-221Y	C CAPACITOR	220pF 50V K		R2003	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
C2105	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M		R2004	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
C2106	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M		R2005	QRE141J-562Y	C RESISTOR	5.6kΩ 1/4W J	
C2107	QETN1HM-106Z	E CAPACITOR	10uF 50V M		R2006	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
C2108	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M		R2007	QRE141J-622Y	C RESISTOR	6.2kΩ 1/4W J	
C2109	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M		R2008	QRE141J-912Y	C RESISTOR	9.1kΩ 1/4W J	
C2110	QEKC1HM-475Z	E CAPACITOR	4.7uF 50V M		R2009	QRE141J-272Y	C RESISTOR	2.7kΩ 1/4W J	
C2111	QFLC1HJ-272Z	M CAPACITOR	2700pF 50V J		R2010	QRE141J-752Y	C RESISTOR	7.5kΩ 1/4W J	
C2112	QFVJ1HJ-104Z	MF CAPACITOR	0.1uF 50V J		R2011	QRE141J-52Y	C RESISTOR	7.5kΩ 1/4W J	
C2113	QFVJ1HJ-104Z	MF CAPACITOR	0.1uF 50V J		R2012	QRE141J-152Y	C RESISTOR	1.5kΩ 1/4W J	
C2114	QFVJ1HJ-184Z	MF CAPACITOR	0.18uF 50V J		R2013	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
C2115	QFVJ1HJ-184Z	MF CAPACITOR	0.18uF 50V J		R2014	QRE141J-303Y	C RESISTOR	30kΩ 1/4W J	
C2116	QFVJ1HJ-154Z	MF CAPACITOR	0.15uF 50V J		R2015	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
C2117	QTE1C06-226Z	E CAPACITOR	22uF 16V		R2016	QRE141J-622Y	C RESISTOR	6.2kΩ 1/4W J	
C2118	QFVJ1HJ-154Z	MF CAPACITOR	0.15uF 50V J		R2017	QRE141J-182Y	C RESISTOR	1.8kΩ 1/4W J	
C2119	QFVJ1HJ-274Z	MF CAPACITOR	0.27uF 50V J		R2032	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
C2126	QFLC1HK-123Z	M CAPACITOR	0.012uF 50V J		R2033	QRE141J-332Y	C RESISTOR	3.3kΩ 1/4W J	
C2134	QETN1HM-225Z	E CAPACITOR	2.2uF 50V M		R2034	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
C2135	QCBB1HK-471Y	C CAPACITOR	470pF 50V K		R2035	QRE141J-562Y	C RESISTOR	5.6kΩ 1/4W J	
C2136	QCBB1HK-151Y	C CAPACITOR	150pF 50V K		R2036	QRE141J-332Y	C RESISTOR	3.3kΩ 1/4W J	
C2137	QETN1AM-107Z	E CAPACITOR	100uF 10V M		R2037	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J	
C2200	QETM1EM-228	E CAPACITOR	2200uF 25V M		R2038	QRE141J-220Y	C RESISTOR	22Ω 1/4W J	
C2209	QETC1HM-684Z	E CAPACITOR	0.68uF 50V M		R2039	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
C2211	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M		R2040	QRE141J-471Y	C RESISTOR	470Ω 1/4W J	
C2212	EETC1HM-105ZJC	E CAPACITOR			R2041	QRE141J-182Y	C RESISTOR	1.8kΩ 1/4W J	
C2213	EETC1CM-106ZJC	E CAPACITOR			R2047	QRE141J-154Y	C RESISTOR	150kΩ 1/4W J	
C2215	EEKC1CM-226ZJC	E CAPACITOR			R2049	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
C2221	EETC1AM-107ZJC	E CAPACITOR			R2100	QRE141J-303Y	C RESISTOR	30kΩ 1/4W J	
C2222	EEKC1CM-107ZJC	E CAPACITOR			R2101	QRE141J-303Y	C RESISTOR	30kΩ 1/4W J	
C2227	EETC1CM-107ZJC	E CAPACITOR			R2103	QRE141J-221Y	C RESISTOR	220Ω 1/4W J	
C2228	EETC1HM-475ZJC	E CAPACITOR			R2104	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
C2236	EETC1CM-476ZJC	E CAPACITOR			R2105	QRE141J-562Y	C RESISTOR	5.6kΩ 1/4W J	
C2239	QETN1HM-105Z	E CAPACITOR	1uF 50V M		R2106	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
C2501	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M		R2107	QRE141J-622Y	C RESISTOR	6.2kΩ 1/4W J	
C2503	QDGB1HK-102Y	C CAPACITOR	1000pF 50V K		R2108	QRE141J-912Y	C RESISTOR	9.1kΩ 1/4W J	
C2505	QDYB1CM-103Y	C CAPACITOR	0.01uF 16V M		R2109	QRE141J-272Y	C RESISTOR	2.7kΩ 1/4W J	
C2506	QCBB1HK-471Y	C CAPACITOR	470pF 50V K		R2110	QRE141J-752Y	C RESISTOR	7.5kΩ 1/4W J	
C2507	QCBB1HK-471Y	C CAPACITOR	470pF 50V K		R2111	QRE141J-752Y	C RESISTOR	7.5kΩ 1/4W J	
C2508	QCBB1HK-331Y	C CAPACITOR	330pF 50V K		R2112	QRE141J-152Y	C RESISTOR	1.5kΩ 1/4W J	
C2509	QCBB1HK-331Y	C CAPACITOR	330pF 50V K		R2113	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
C3201	EETC1CM-107ZJC	E CAPACITOR			R2114	QRE141J-303Y	C RESISTOR	30kΩ 1/4W J	
C3202	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J		R2115	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
C3203	EETC1CM-107ZJC	E CAPACITOR			R2116	QRE141J-622Y	C RESISTOR	6.2kΩ 1/4W J	
C3204	QFLC1HJ-104Z	M CAPACITOR	0.1uF 50V J		R2117	QRE141J-182Y	C RESISTOR	1.8kΩ 1/4W J	
C3205	EETC1CM-107ZJC	E CAPACITOR			R2132	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R2133	QRE141J-332Y	C RESISTOR	3.3kΩ 1/4W J		R7124	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R2134	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J		R7125	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R2135	QRE141J-562Y	C RESISTOR	5.6kΩ 1/4W J		R7126	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R2136	QRE141J-332Y	C RESISTOR	3.3kΩ 1/4W J		R7127	QRE141J-123Y	C RESISTOR	12kΩ 1/4W J	
R2137	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J		R7128	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R2138	QRE141J-220Y	C RESISTOR	22Ω 1/4W J		R7129	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R2139	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J		R7130	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R2140	QRE141J-471Y	C RESISTOR	47Ω 1/4W J		R7131	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R2141	QRE141J-182Y	C RESISTOR	1.8kΩ 1/4W J		R7132	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R2147	QRE141J-154Y	C RESISTOR	150kΩ 1/4W J		R7133	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R2149	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J		R7134	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R2200	QRE141J-273Y	C RESISTOR	27kΩ 1/4W J		R7135	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R2207	QRE141J-513Y	C RESISTOR	51kΩ 1/4W J		R7136	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R2208	QRE141J-124Y	C RESISTOR	120kΩ 1/4W J		R7137	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R2216	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J		R7138	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R2217	QRE141J-101Y	C RESISTOR	100Ω 1/4W J		R7139	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R2218	QRE141J-471Y	C RESISTOR	47Ω 1/4W J		R7140	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R2221	QRE141J-101Y	C RESISTOR	100Ω 1/4W J		R7141	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R2222	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J		R7142	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R2224	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J		R7143	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R2228	QRE141J-334Y	C RESISTOR	330kΩ 1/4W J		R7144	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R2230	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J		R7145	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R2233	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J		R7146	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R3200	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J		R7147	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R3201	QRE141J-822Y	C RESISTOR	8.2kΩ 1/4W J		R7148	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R3202	QRE141J-122Y	C RESISTOR	1.2kΩ 1/4W J		R7149	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R3203	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J		R7150	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R3204	QRE141J-122Y	C RESISTOR	1.2kΩ 1/4W J		R7151	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R3205	QRE141J-622Y	C RESISTOR	6.2kΩ 1/4W J		R7152	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R3206	QRE141J-122Y	C RESISTOR	1.2kΩ 1/4W J		R7153	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R3207	QRE141J-820Y	C RESISTOR	82Ω 1/4W J		R7154	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R3209	QRE141J-820Y	C RESISTOR	82Ω 1/4W J		R7155	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R3500	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J		R7157	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R3503	QRE141J-6R8Y	C RESISTOR	6.8Ω 1/4W J		R7158	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R3504	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J		R7159	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R3505	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J		R7160	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J	
R7001	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J		R7161	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7002	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J		R7201	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R7003	QRE141J-331Y	C RESISTOR	330Ω 1/4W J		R7202	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7004	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J		R7203	QRE141J-823Y	C RESISTOR	82kΩ 1/4W J	
R7005	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J		R7206	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
R7006	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J		R7214	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
R7007	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J		R7215	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
R7008	QRE141J-333Y	C RESISTOR	33kΩ 1/4W J		R7217	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7041	QRE141J-823Y	C RESISTOR	82kΩ 1/4W J		R7218	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7042	QRE141J-394Y	C RESISTOR	390kΩ 1/4W J		R7221	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7043	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J		R7232	QRE141J-823Y	C RESISTOR	82kΩ 1/4W J	
R7062	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J		R7236	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7064	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J		R7238	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7065	QRE141J-563Y	C RESISTOR	56kΩ 1/4W J		R7239	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7075	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J		R7240	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7076	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J		R7247	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7077	QRE141J-913Y	C RESISTOR	91kΩ 1/4W J		R7252	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7078	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J		R7253	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R7079	QRE141J-223Y	C RESISTOR	22kΩ 1/4W J		R7254	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7091	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J		R7255	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7092	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J		L2500	QQL231K-560Y	COIL	56uH K	
R7093	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J		L2501	QQL231K-560Y	COIL	56uH K	
R7101	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J		L3500	QQL231K-4R7Y	COIL	4.7uH K	
R7102	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J		L7001	QQL231K-100Y	COIL	10uH K	
R7103	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J		L7002	QQL231K-470Y	COIL	47uH K	
R7106	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J		L7003	QQL231K-4R7Y	COIL	4.7uH K	
R7108	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J		CN900	QGF1205C1-10	CONNECTOR	FFC/FPC (1-10)	
R7109	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J		CN901	QGF1205C1-09	CONNECTOR	FFC/FPC (1-9)	
R7110	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J		CN902	QGF1205F1-13	CONNECTOR	FFC/FPC (1-13)	
R7111	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J		CN903	QGF1205F1-13	CONNECTOR	FFC/FPC (1-13)	
R7112	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J		CN904	QGF1205F1-16	CONNECTOR	FFC/FPC (1-16)	
R7113	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J		CN905	QGA2501F1-03	CONNECTOR	W-B (1-3)	
R7114	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J		CN908	QGA2501C1-02	CONNECTOR	W-B (1-2)	
R7115	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J		CN913	QGD2504C1-04Z	CONNECTOR	(1-4)	
R7116	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J		CN931	QGF1205F1-17	CONNECTOR	FFC/FPC (1-17)	
R7117	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J		CN933	QGF1205C1-04	CONNECTOR	FFC/FPC (1-4)	
R7118	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J		FW901	QUM158-11DGZ4	WIRE		
R7119	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J		FW902	QUM157-11DGZ4	FLAT WIRE		
R7120	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J		FW904	QUM152-15Z4Z4	FLAT WIRE		
R7121	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J		J900	QNN0018-002	PIN JACK		
R7122	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J						
R7123	QRE141J-222Y	C RESISTOR	2.2kΩ 1/4W J						

△ Symbol No.	Part No.	Part Name	Description	Local
J902	GP1FA550TZ	OPTICAL JACK		
K2200	QQR0621-001Z	COIL		
K7001	QQR0621-001Z	COIL		
K7002	QQR0621-001Z	COIL		
K7003	QQR0621-001Z	COIL		
PP900	QZW0038-001	WIRE CLAMP		
X7001	QAX0763-001Z	CRYSTAL		
X7002	QAX0401-001	CRYSTAL		

CD servo board

Block No. [0][3][0][0]

△ Symbol No.	Part No.	Part Name	Description	Local
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IC601	AN22000A-W	IC		
IC651	MN662748RPMFA	IC		
IC801	LA6541-X	IC		
IC802	LB1641	IC		
Q631	2SA1037AK/RS-X	TRANSISTOR		
Q801	2SA952/LK-T	TRANSISTOR		
D601	1SS355-X	SI DIODE		
D602	1SS355-X	SI DIODE		
D831	MTZJ5.6B-T2	Z DIODE		
C601	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C602	NCB31HK-222X	C CAPACITOR	2200pF 50V K	
C603	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C604	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C605	NCS31HJ-391X	C CAPACITOR	390pF 50V J	
C606	NCS31HJ-820X	C CAPACITOR	82pF 50V J	
C610	NCB31CK-273X	C CAPACITOR	0.027uF 16V K	
C612	QERF1HM-105Z	E CAPACITOR	1uF 50V M	
C613	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
C614	NCB31CK-273X	C CAPACITOR	0.027uF 16V K	
C615	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C616	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C617	NCS31HJ-331X	C CAPACITOR	330pF 50V J	
C619	NCS31HJ-330X	C CAPACITOR	33pF 50V J	
C621	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C622	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C623	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C624	QERFOJM-107Z	E CAPACITOR	100uF 6.3V M	
C631	QERF1CM-106Z	E CAPACITOR	10uF 16V M	
C632	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C633	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C641	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C642	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C643	NCS31HJ-821X	C CAPACITOR	820pF 50V J	
C651	NCS31HJ-120X	C CAPACITOR	12pF 50V J	
C652	NCS31HJ-120X	C CAPACITOR	12pF 50V J	
C653	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C654	NCS31HJ-151X	C CAPACITOR	150pF 50V J	
C655	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C656	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C657	QERF1AM-227Z	E CAPACITOR	220uF 10V M	
C658	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C661	NCS31HJ-471X	C CAPACITOR	470pF 50V J	
C663	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C664	NCB31HK-223X	C CAPACITOR	0.022uF 50V K	
C665	NCB31AK-154X	C CAPACITOR	0.15uF 10V K	
C669	QERF1AM-227Z	E CAPACITOR	220uF 10V M	
C670	NCS31HJ-151X	C CAPACITOR	150pF 50V J	
C671	NCS31HJ-151X	C CAPACITOR	150pF 50V J	
C672	NCS31HJ-151X	C CAPACITOR	150pF 50V J	
C673	QERF1AM-227Z	E CAPACITOR	220uF 10V M	
C676	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C677	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C679	QERFOJM-107Z	E CAPACITOR	100uF 6.3V M	
C680	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C681	NCB31AK-334X	C CAPACITOR	0.33uF 10V K	
C693	NCB31HK-222X	C CAPACITOR	2200pF 50V K	
C694	NCB31HK-222X	C CAPACITOR	2200pF 50V K	

△ Symbol No.	Part No.	Part Name	Description	Local
C801	NCB31HK-682X	C CAPACITOR	6800pF 50V K	
C802	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C811	NCS31HJ-391X	C CAPACITOR	390pF 50V J	
C812	NCS31HJ-391X	C CAPACITOR	390pF 50V J	
C813	NCS31HJ-391X	C CAPACITOR	390pF 50V J	
C814	NCS31HJ-391X	C CAPACITOR	390pF 50V J	
C821	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C822	QERF1AM-227Z	E CAPACITOR	220uF 10V M	
C823	QERF1AM-227Z	E CAPACITOR	220uF 10V M	
C824	NCB31HK-222X	C CAPACITOR	2200pF 50V K	
C831	EEKJ1CM-107ZJC	E CAPACITOR	0.01uF 50V K	
C832	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C833	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
R601	NRSA63J-274X	MG RESISTOR	270kΩ 1/16W J	
R602	NRSA63J-684X	MG RESISTOR	680kΩ 1/16W J	
R603	NRSA63J-433X	MG RESISTOR	43kΩ 1/16W J	
R604	NRSA63J-184X	MG RESISTOR	180kΩ 1/16W J	
R605	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R606	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R607	NRSA63J-623X	MG RESISTOR	62kΩ 1/16W J	
R610	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R611	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R612	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	
R613	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R615	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R616	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R617	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R631	NRSA63J-2R2X	MG RESISTOR	2.2Ω 1/16W J	
R632	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R634	NRSA63J-120X	MG RESISTOR	12Ω 1/16W J	
R635	NRSA63J-121X	MG RESISTOR	120Ω 1/16W J	
R636	NRSA63J-910X	MG RESISTOR	91Ω 1/16W J	
R641	NRSA63J-154X	MG RESISTOR	150kΩ 1/16W J	
R642	NRSA63J-564X	MG RESISTOR	560kΩ 1/16W J	
R643	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R647	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R651	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R652	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R653	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R654	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R655	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R656	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R657	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R658	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R659	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R661	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	
R662	NRSA63J-683X	MG RESISTOR	68kΩ 1/16W J	
R663	NRSA63J-124X	MG RESISTOR	120kΩ 1/16W J	
R664	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
R665	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R666	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J	
R667	NRSA63J-4R7X	MG RESISTOR	4.7Ω 1/16W J	
R670	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R681	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R682	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R683	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R684	NRSA63J-155X	MG RESISTOR	1.5MΩ 1/16W J	
R691	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R692	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R801	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R802	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R803	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R804	NRSA63J-823X	MG RESISTOR	82kΩ 1/16W J	
R805	NRSA63J-912X	MG RESISTOR	9.1kΩ 1/16W J	
R806	NRSA63J-513X	MG RESISTOR	51kΩ 1/16W J	
R807	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R808	NRSA63J-563X	MG RESISTOR	56kΩ 1/16W J	
R821	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R822	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R831	QRE141J-100Y	C RESISTOR	10Ω 1/4W J	
L831	QQL244K-100Z	COIL	10uH K	
CN601	QGF1016F1-16	CONNECTOR	FFC/FPC (1-16)	
CN606	QGF1205F1-05	CONNECTOR	FFC/FPC (1-5)	
CN651	QGF1205F1-16	CONNECTOR	FFC/FPC (1-16)	
CN652	QGF1205F1-13	CONNECTOR	FFC/FPC (1-13)	

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
CN801 X651	QGA2001C1-06 QAX0413-001Z	CONNECTOR CRYSTAL	W-B (1-6)		C54	NCB21HK-473X	C CAPACITOR	0.047uF 50V K	
Tuner board									
Block No. [0][4][0][0]									
△ Symbol No.	Part No.	Part Name	Description	Local	C55	NCS21HJ-330X	C CAPACITOR	33pF 50V J	
IC1	LA1838	IC			C56	NCS21HJ-100X	C CAPACITOR	10pF 50V J	
IC2	LC72136N	IC			C57	NCB21HK-102X	C CAPACITOR	1000pF 50V K	
IC3	LC72723	IC(RDS)			C58	NCB21HK-473X	C CAPACITOR	0.047uF 50V K	
Q1	2SC2814/4-5/-X	TRANSISTOR			C59	NCB21HK-102X	C CAPACITOR	1000pF 50V K	
Q2	2SD601A/QR/-X	TRANSISTOR			C70	NCS21HJ-220X	C CAPACITOR	22pF 50V J	
Q3	2SD601A/QR/-X	TRANSISTOR			C71	NCS21HJ-220X	C CAPACITOR	22pF 50V J	
Q4	KRA107S-X	DIGI TRANSISTOR			C72	NCB21HK-561X	C CAPACITOR	560pF 50V K	
Q5	KRA107S-X	DIGI TRANSISTOR			C73	NCB21HK-104X	C CAPACITOR	0.1uF 50V K	
D1	1SS133-T2	SI DIODE			C74	NCB21HK-104X	C CAPACITOR	0.1uF 50V K	
D2	1SS133-T2	SI DIODE			C75	EETC1HM-106ZJC	E CAPACITOR		
D3	1SS133-T2	SI DIODE			C76	NCB21HK-331X	C CAPACITOR	330pF 50V K	
D4	1SS133-T2	SI DIODE			R2	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	
D11	1SS133-T2	SI DIODE			R3	NRSA02J-224X	MG RESISTOR	220kΩ 1/10W J	
C1	NCB21HK-223X	C CAPACITOR	0.022uF 50V K		R4	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	
C2	NCB21HK-103X	C CAPACITOR	0.01uF 50V K		R5	NRSA02J-560X	MG RESISTOR	56Ω 1/10W J	
C3	EETC1CM-106ZJC	E CAPACITOR			R6	NRSA02J-120X	MG RESISTOR	12Ω 1/10W J	
C4	NCB21HK-103X	C CAPACITOR	0.01uF 50V K		R10	NRSA02J-222X	MG RESISTOR	2.2kΩ 1/10W J	
C6	NCB21HK-222X	C CAPACITOR	2200pF 50V K		R11	NRSA02J-472X	MG RESISTOR	4.7kΩ 1/10W J	
C7	NCB21HK-102X	C CAPACITOR	1000pF 50V K		R12	NRSA02J-182X	MG RESISTOR	1.8kΩ 1/10W J	
C8	NCB21HK-102X	C CAPACITOR	1000pF 50V K		R13	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
C9	NCB21HK-102X	C CAPACITOR	1000pF 50V K		R14	NRSA02J-104X	MG RESISTOR	100kΩ 1/10W J	
C10	NCS21HJ-120X	C CAPACITOR	12pF 50V J		R15	NRSA02J-332X	MG RESISTOR	3.3kΩ 1/10W J	
C11	NCB21HK-104X	C CAPACITOR	0.1uF 50V K		R16	NRSA02J-472X	MG RESISTOR	4.7kΩ 1/10W J	
C12	NCB21HK-473X	C CAPACITOR	0.047uF 50V K		△ R17	QRZ9005-680X	F.RESISTOR	68Ω	
C13	NCS21HJ-120X	C CAPACITOR	12pF 50V J		R18	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
C14	QEKC1AM-107Z	E CAPACITOR	100uF 10V M		R19	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
C15	NCS21HJ-120X	C CAPACITOR	12pF 50V J		R20	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
C16	NCS21HJ-120X	C CAPACITOR	12pF 50V J		R21	NRSA02J-562X	MG RESISTOR	5.6kΩ 1/10W J	
C17	NCB21HK-392X	C CAPACITOR	3900pF 50V K		R22	NRSA02J-472X	MG RESISTOR	4.7kΩ 1/10W J	
C18	QE6Q1HM-474Z	E CAPACITOR	0.47uF 50V M		R23	NRSA02J-182X	MG RESISTOR	1.8kΩ 1/10W J	
C19	NCB21HK-473X	C CAPACITOR	0.047uF 50V K		R24	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
C20	NCB21HK-102X	C CAPACITOR	1000pF 50V K		R25	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	
C21	NCB21HK-223X	C CAPACITOR	0.022uF 50V K		R26	NRSA02J-222X	MG RESISTOR	2.2kΩ 1/10W J	
C22	NCS21HJ-151X	C CAPACITOR	150pF 50V J		R27	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
C23	NCS21HJ-151X	C CAPACITOR	150pF 50V J		R28	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
C24	NCS21HJ-151X	C CAPACITOR	150pF 50V J		R29	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
C25	QEKC1AM-107Z	E CAPACITOR	100uF 10V M		R30	NRSA02J-272X	MG RESISTOR	2.7kΩ 1/10W J	
C26	NCB21HK-103X	C CAPACITOR	0.01uF 50V K		R31	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
C27	NCB21HK-103X	C CAPACITOR	0.01uF 50V K		R32	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
C30	EETC1CM-107ZJC	E CAPACITOR			R33	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	
C31	EETC1CM-226ZJC	E CAPACITOR			R34	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	
C32	NCB21HK-473X	C CAPACITOR	0.047uF 50V K		R35	NRSA02J-562X	MG RESISTOR	5.6kΩ 1/10W J	
C33	NCB21HK-473X	C CAPACITOR	0.047uF 50V K		R36	NRSA02J-332X	MG RESISTOR	3.3kΩ 1/10W J	
C34	NCB21HK-223X	C CAPACITOR	0.022uF 50V K		R37	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
C35	NCB21HK-473X	C CAPACITOR	0.047uF 50V K		R38	NRSA02J-393X	MG RESISTOR	39kΩ 1/10W J	
C36	EETC1HM-105ZJC	E CAPACITOR			R39	NRSA02J-393X	MG RESISTOR	39kΩ 1/10W J	
C37	EETC1HM-105ZJC	E CAPACITOR			R40	NRSA02J-393X	MG RESISTOR	39kΩ 1/10W J	
C38	EETC1HM-224ZJC	E CAPACITOR			R41	NRSA02J-332X	MG RESISTOR	3.3kΩ 1/10W J	
C39	EETC1HM-105ZJC	E CAPACITOR			R60	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
C40	QETN1CM-106Z	E CAPACITOR	10uF 16V M		R72	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
C41	QETN1CM-106Z	E CAPACITOR	10uF 16V M		R73	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
C42	NCB21HK-182X	C CAPACITOR	1800pF 50V K		L1	QQR1094-002	COIL BLOCK		
C43	NCB21HK-182X	C CAPACITOR	1800pF 50V K		L2	QQL231K-330Y	COIL	33uH K	
C44	QETN1CM-106Z	E CAPACITOR	10uF 16V M		L3	QQL231K-4R7Y	COIL	4.7uH K	
C45	QETN1CM-106Z	E CAPACITOR	10uF 16V M		L70	QQL231K-101Y	COIL	100uH K	
C46	NCB21HK-223X	C CAPACITOR	0.022uF 50V K		T1	QQR0793-001	IFT		
C47	EETC1HM-105ZJC	E CAPACITOR			CF1	QAX0420-001	C FILTER		
C48	NCB21HK-222X	C CAPACITOR	2200pF 50V K		CF2	QAX0458-001Z	C.FILTER		
C49	NCS21HJ-471X	C CAPACITOR	470pF 50V J		CF3	QAX0610-001Z	C FILTER		
C50	EETC1CM-226ZJC	E CAPACITOR			CN1	QGF1205F1-13	CONNECTOR		FFC/FPC (1-13)
C51	EETC1HM-105ZJC	E CAPACITOR			J1	QNB0014-001	ANT.TERMINAL		
C52	QFVJ1HJ-274Z	MF CAPACITOR	0.27uF 50V J		TU1	QAU0160-001	FRONT END		
C53	EETC1CM-226ZJC	E CAPACITOR			X1	QAX0402-001	CRYSTAL		
					X70	QAX0263-001Z	RESONATOR		

Head amplifier board

Block No. [0][5][0][0]

△ Symbol No.	Part No.	Part Name	Description	Local
IC31	BA3126N	IC		
IC32	AN7317	IC		
IC33	BU4094BCF-X	IC		
Q101	DTC114TKA-X	TRANSISTOR		
Q103	DTC114TKA-X	TRANSISTOR		
Q201	DTC114TKA-X	TRANSISTOR		
Q203	DTC114TKA-X	TRANSISTOR		
Q302	2SC2001/K-T	TRANSISTOR		
Q305	2SC2001/LKJ-T	TRANSISTOR		
Q321	DTC144EKA-X	DIGI TRANSISTOR		
Q331	DTC114TKA-X	TRANSISTOR		
Q371	2SA952/LKJ-T	TRANSISTOR		
Q372	DTC124EKA-X	DIGI TRANSISTOR		
Q375	2SB562/C-T	TRANSISTOR		
Q376	2SC2412K/RS-X	TRANSISTOR		
D375	HZM5.1NB2-X	CHIP Z DIODE CM		
C101	NCS21HJ-821X	C CAPACITOR	820pF 50V J	
C102	NCS21HJ-221X	C CAPACITOR	220pF 50V J	
C103	QEJK0JM-227Z	E CAPACITOR	220uF 6.3V M	
C104	NCB21HK-333X	C CAPACITOR	0.033uF 50V K	
C105	NCB21HK-222X	C CAPACITOR	2200pF 50V K	
C106	QEJK1CM-106Z	E CAPACITOR	10uF 16V M	
C107	NCS21HJ-561X	C CAPACITOR	560pF 50V J	
C108	QEJK1EM-475Z	E CAPACITOR	4.7uF 25V M	
C109	QEJK1EM-475Z	E CAPACITOR	4.7uF 25V M	
C110	NCB21HK-682X	C CAPACITOR	6800pF 50V K	
C111	NCB21HK-152X	C CAPACITOR	1500pF 50V K	
C113	NCB21HK-393X	C CAPACITOR	0.039uF 50V K	
C121	NCS21HJ-331X	C CAPACITOR	330pF 50V J	
C201	NCS21HJ-821X	C CAPACITOR	820pF 50V J	
C202	NCS21HJ-221X	C CAPACITOR	220pF 50V J	
C203	QEJK0JM-227Z	E CAPACITOR	220uF 6.3V M	
C204	NCB21HK-333X	C CAPACITOR	0.033uF 50V K	
C205	NCB21HK-222X	C CAPACITOR	2200pF 50V K	
C206	QEJK1CM-106Z	E CAPACITOR	10uF 16V M	
C207	NCS21HJ-561X	C CAPACITOR	560pF 50V J	
C208	QEJK1EM-475Z	E CAPACITOR	4.7uF 25V M	
C209	QEJK1EM-475Z	E CAPACITOR	4.7uF 25V M	
C210	NCB21HK-682X	C CAPACITOR	6800pF 50V K	
C211	NCB21HK-152X	C CAPACITOR	1500pF 50V K	
C213	NCB21HK-393X	C CAPACITOR	0.039uF 50V K	
C221	NCS21HJ-331X	C CAPACITOR	330pF 50V J	
C301	QEJK1AM-107Z	E CAPACITOR	100uF 10V M	
C302	NCB21HK-393X	C CAPACITOR	0.039uF 50V K	
C303	QEJK0JM-227Z	E CAPACITOR	220uF 6.3V M	
C304	QEJK1CM-226Z	E CAPACITOR	22uF 16V M	
C305	QEJK1CM-226Z	E CAPACITOR	22uF 16V M	
C306	QEJK1CM-476Z	E CAPACITOR	47uF 16V M	
C307	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C308	NCB21HK-152X	C CAPACITOR	1500pF 50V K	
C310	NCB21HK-223X	C CAPACITOR	0.022uF 50V K	
C313	QEJK1AM-107Z	E CAPACITOR	100uF 10V M	
C314	QCZ2022-155Z	C CAPACITOR	1.5uF 25V Z	
C316	QFG32AJ-223Z	PP CAPACITOR	0.022uF 100V J	
C319	QFLM1HJ-472Z	M CAPACITOR	4700pF 50V J	
C331	QEJK1CM-476Z	E CAPACITOR	47uF 16V M	
C334	QEJK1EM-475Z	E CAPACITOR	4.7uF 25V M	
C371	QEJK1EM-475Z	E CAPACITOR	4.7uF 25V M	
C374	QEJK1AM-107Z	E CAPACITOR	100uF 10V M	
C376	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
R101	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R102	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R103	NRSA63J-242X	MG RESISTOR	2.4kΩ 1/16W J	
R104	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R105	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R106	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R107	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R108	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R109	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R110	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	

△ Symbol No.	Part No.	Part Name	Description	Local
R111	NRSA63J-363X	MG RESISTOR	36kΩ 1/16W J	
R112	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R116	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R121	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R122	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R201	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R202	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R203	NRSA63J-242X	MG RESISTOR	2.4kΩ 1/16W J	
R204	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
R205	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R206	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R207	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R208	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R209	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R210	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R211	NRSA63J-363X	MG RESISTOR	36kΩ 1/16W J	
R212	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R216	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R221	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R222	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R301	NRS181J-221X	MG RESISTOR	22Ω 1/8W J	
R303	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	
R304	NRS181J-101X	MG RESISTOR	100kΩ 1/8W J	
R305	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R310	QRJ146J-4R7X	UNF C RESISTOR	4.7Ω 1/4W J	
R313	NRSA63J-2R2X	MG RESISTOR	2.2Ω 1/16W J	
R314	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
R315	NRSA63J-101X	MG RESISTOR	100kΩ 1/16W J	
R327	NRSA63J-474X	MG RESISTOR	470kΩ 1/16W J	
R335	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R336	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R337	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R338	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
R339	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R340	NRS181J-391X	MG RESISTOR	390Ω 1/8W J	
R341	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R342	NRSA63J-203X	MG RESISTOR	20kΩ 1/16W J	
R343	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R345	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
△ R353	QRZ9005-100X	F.RESISTOR	10Ω	
R371	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
R372	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R375	NRSA02J-151X	MG RESISTOR	150Ω 1/10W J	
R376	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
VR31	QVP0008-203Z	TRIM RESISTOR	20kΩ	
VR37	QVP0008-103Z	TRIM RESISTOR	10kΩ	
L301	QQR1118-001	OSC COIL(BIAS)		
L303	QLL244K-100Z	COIL	10uH K	
CN31	QGF1201F3-06	CONNECTOR	FFC/FPC (1-6)	
CN32	QGB2011M1-10	CONNECTOR	B-B (1-10)	
CN33	QGF1205F1-09	CONNECTOR	FFC/FPC (1-9)	
CN34	QGF1201F3-10	CONNECTOR	FFC/FPC (1-10)	
FW31	QUM024-06A2Z3	PARA RIBON WIRE		

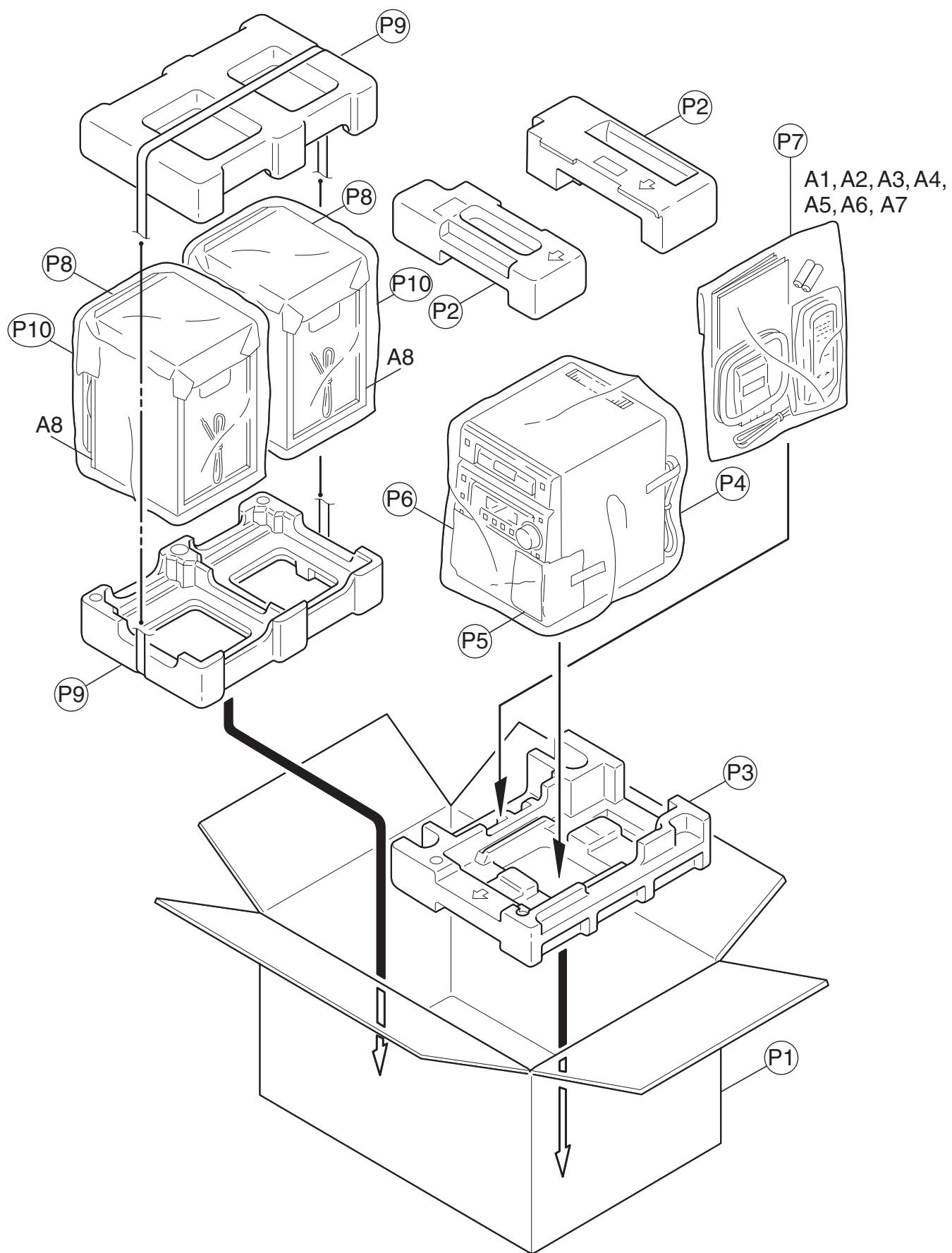
Cassette switch board

△ Symbol No.	Part No.	Part Name	Description	Local
IC1	SG-105F3-BB,C	PHOTO SENSER		
D1	1SR139-400-T2	SI DIODE		
CN1	QGB2011L1-10	CONNECTOR	B-B (1-10)	
P1	QNZ0104-001	POST PIN		
SW1	QSW0832-001	LEAF SWITCH		
SW2	QSW0832-001	LEAF SWITCH		
SW4	QSW0832-001	LEAF SWITCH		
SW5	QSW0832-001	LEAF SWITCH		
SW6	QSW0859-001	SW		

< MEMO >

Packing materials and accessories parts list

Block No. M 3 M M



Packing and accessories

Block No. [M][3][M][M]

△ Symbol No.	Part No.	Part Name	Description	Local
A 1	GVT0105-008A	INST BOOK	ENG	P55B
A 1	GVT0105-006A	INST BOOK	GER,FRE,DUT	P55E
A 1	GVT0105-007A	INST BOOK	SWE,FIN,DAN,GER, FRE,SPA,ITA	P55EN
A 2	BT-54013-5	W.CARD		
A 3	RM-SUXP5R	REMOCON		
A 4	-----	BATTERY	(x2)	
A 5	QAL0014-001	AM LOOP ANT		
A 6	QAL0457-001	ANT.WIRE		
A 7	VNA3000-204	REGIST.CARD		P55B
A 8	UXP55E-SPBOX-R	SPK WITH BOX		
A 8	UXP55E-SPBOX-L	SPK WITH BOX		
P 1	GV20236-001A	CARTON ASSY.		
P 2	GV10070-001A	CUSHION UPPER		
P 3	GV10075-001A	CUSHION BOTTOM		
P 4	QPC05006515P	POLY BAG	50cm x 65cm	
P 5	GV40437-002A	CLOTH		
P 6	GV40168-008A	SHEET		
P 7	QPC02503515P	POLY BAG	25cm x 35cm	
P 8	402SPK208	POLY BAG	(x2)	
P 9	404SPK208	POLYFOAM	(x2)	
P 10	434SPK208	MIRAMAT SHEET	(x2)	